THE MARINE REVIEW

VOL. XXXV. CLEVELAND, APRIL 25, 1907. No. 17

Photos by J. A. Meiser.

VIEW OF THE BUSINESS PORTION OF EUREKA FROM TOWER OF EUREKA ELECTRIC LIGHT WORKS, CORNER D AND SECOND STREETS, THE RAILWAY TRACKS BEING ON SECOND STREET.

HUMBOLDT HARBOR, CALIFORNIA

BY CLARENCE E. EDWORDS, OF THE CALIFORNIA PROMOTION COMMITTEE.

Gold has been the incentive which has sent men to explore the hidden places of the world. Gold has made nations and it has wrecked them. The desire for the yellow metal has caused men to suffer hardships and privations the world over, and it is therefore no cause for comment that the harbors of the Pacific coast of the United States were discovered through the insatiable desire for gold. In this respect, however, Humboldt bay in the northern part of California, and the splendid Eureka harbor, differ from the usual run of discoveries.

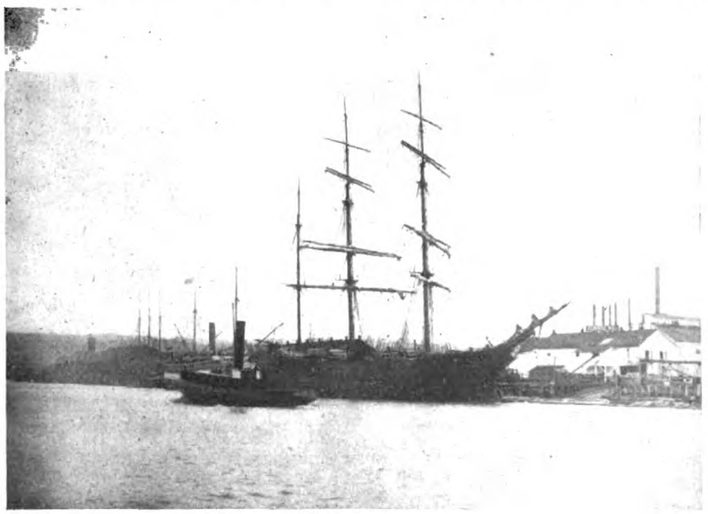
It was not so much the desire to find gold that caused the discovery of Humboldt bay, as to find a way to gold that had already been found along the Trinity river. These mines had been discovered and occupied for several months, and as they were reported to be fabulously rich, there was a consequent desire to reach them by an easier and more accessible route than over the rugged mountains of the Coast range of California. It was the general belief that Trinity river ran into the Pacific ocean, and for the purpose of discovering the mouth of this river, in hopes of finding an easy road to the mines, no less than fourteen vessels fitted out for the purpose of finding where Trinity river emptied into the Pacific. During the latter part of 1849 and the early part of 1850 these vessels cruised along the precipitous shores of California from San Fran-

DOLBEER & CARSON WHARF.

Generated on 2024-08-28 13:27 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

cisco to points far up on the Oregon coast.

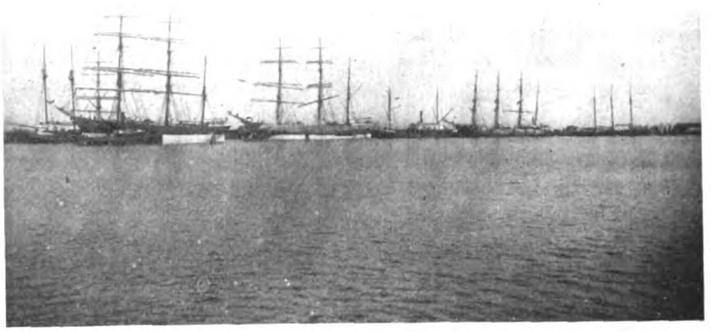
Capt. Douglass Ottinger, with the schooner Laura Virginia, had the honor of discovery, and in April of 1850 he made entrance into Humboldt bay, and the people of his vessel formed the first permanent settlement on its shores. According to the stories of early trappers this bay was first entered by white men in 1830 or 1831, when William G. Ray, a factor of the Hudson Bay company, entered it under the impression that it was Drake's bay. He was unable to establish a settlement on account of the hostility of the Indians, and he made no record of the event.



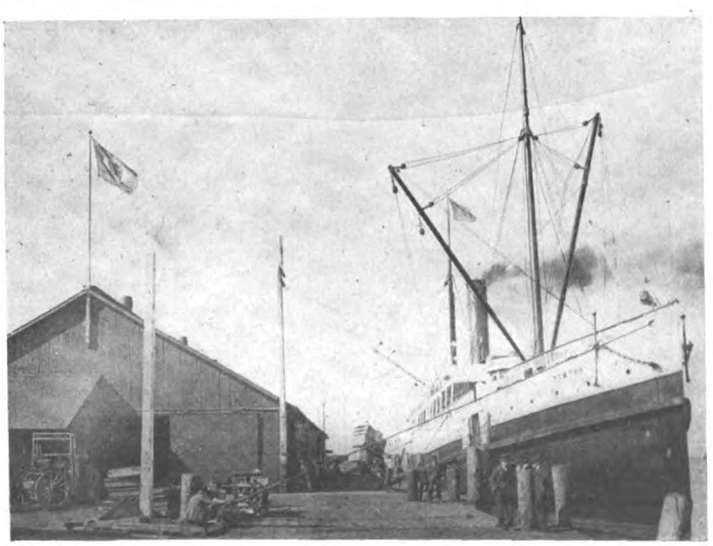
McKAY'S MILL WHARF.

While the men landed from the Laura Virgina were gold seekers, many of them were so impressed with the richness of the surrounding country that they decided to remain as farmers. The first saw mill was erected in 1850 and during the following year five more mills were at work, the combined output of these mills being 20,657,000 feet of lumber in 1845. The first operation of these mills was confined to pine, spruce and fir lumber, as the size of the redwood logs was such as to preclude their being handled with the facilities at the command of the mills. During the year 1855 the first redwood lumber was cut and shipped to San Francisco. This was the beginning of the lumber traffic for which Eureka harbor is now noted, and the output of the year 1905 had reached the enormous total of 217,493,730 feet of sawed lumber and 711,612,500 shingles. So great has become the commerce of this port that during the past year the exports amounted to $8,710,213 and the imports to $5,269,539. It must be remembered that this is the product of Humboldt county alone.

Humboldt bay is completely landlocked, and affords full protection for all vessels. It is twelve miles long and runs in width from half a mile to three miles. Between it and the ocean is a range of low-lying sand dunes which form the north and south peninsulas, the entrance being a little south of the center. From this entrance to the wharves of Eureka is a distance of six miles with depths of water at low tide of from nineteen to forty-three feet. From Eureka to Arcata wharf is six miles with a depth of water from ten to twelve feet. There is a continuous wharf along the Eureka waterfront of one and a half miles, and a depth of water at the pier heads of from thirteen to eighteen feet. The Humboldt bar has a low water depth in winter of twenty-four feet and in summer of thirty feet.



ARCATA WHARF.



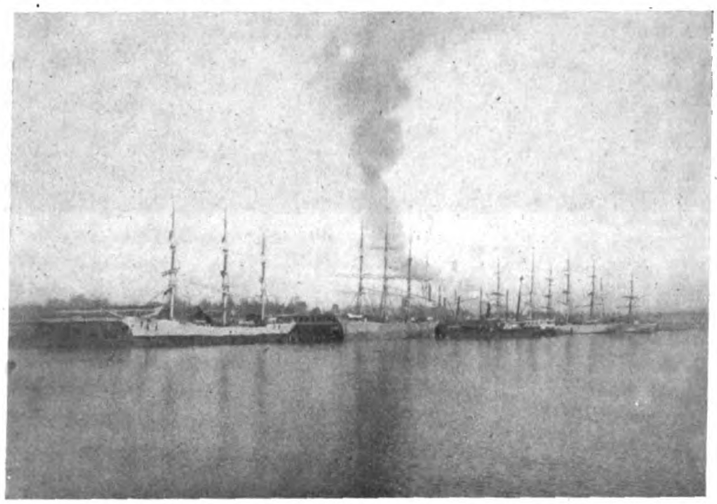
PACIFIC COAST STEAMSHIP CO.'S WHARF, FOOT OF C STREET, EUREKA.

The general government has expended $2,000,000 in the construction of a jetty system to make this entrance across the bar of a permanent depth, and several hundred thousand dollars have been expended in dredging the channels of the bay. Buoys and lights have been placed at all needed points.

Inside Humboldt bay are various

Generated on 2024-08-28 13:26 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

wharves and landings. Arcata is six miles from Eureka, and Bayside the same distance. Samoa, immediately across the bay, the seat of a big lumber plant, is one mile. Fairhaven with big ship yards is three miles, and Bucksport two miles. Field's landing at a distance of seven and a half miles, completes the list.



SAMOA WHARF.

The commercial capacity of Humboldt bay, its channels and extent of miles of opportunity for wharfage, is such as to accommodate the commerce of a hemisphere, with such dredging as is within the range of easy accomplishment. Twenty miles north lies the roadstead of Trinidad, connection with which is had by rail, where there is depth sufficient at the wharves for the largest vessel that floats.

Humboldt bay holds the distinction of being immediately abreast of the lower edge of the Japan current, and immediately west of the two lowest passes through the Sierra, thus bringing it in line for the most direct traffic route between the Eastern seaboard and the Orient and trans-Pacific ports. It is midway between the border lines of British Columbia and Mexico, and is 100 miles west of any California land-locked harbor. Vessels coming from across the Pacific generally sight Cape Mendocino, twenty miles south of Humboldt bay, first on reaching this coast and then sail down to San Francisco. Cape Mendocino is the most prominent promontory and one of the most important beacons on the Pacific coast.

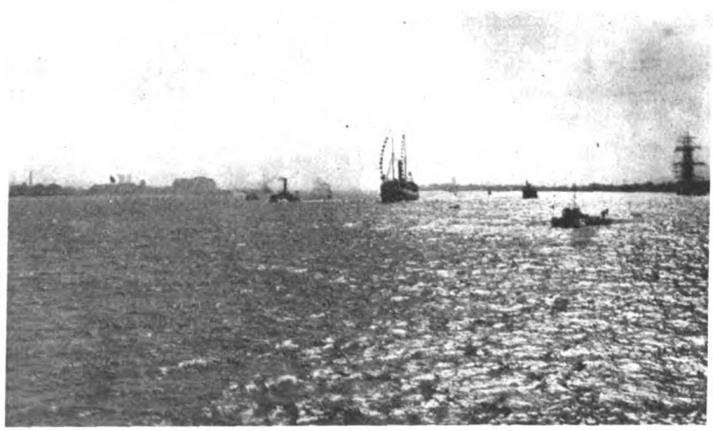
Humboldt bay does not merely offer the advantage of a port and way station between points, but is of itself the natural depot for one of the most fertile regions on the continent. The port is surrounded by natural resources that places it equal in natural wealth to any other portion of the United States. It is a matter worthy of note that Eureka enjoys the most even temperature of any section of the United States with the exception of one point in Florida, and as a consequence the climate is very healthful, the death rate being but a little over seven to the 1,000, annually.

Eureka is the county seat of Humboldt county and has an assessment roll of $7,243,000, having an estimated population of 13,000. During the past five years $20,000,000 of outside capital has been invested in the city, and during the same time $465,000 has been spent in city improvements. During the year 1905, there came into the port 973 vessels bringing commerce from all parts of the world. During the same time 985 vessels departed carrying the products of Humboldt county to the ports of the world. The county is notably rich in agricultural products as well as in lumber from its wondrous forests. Dairy produce is marketed in many parts of the world, and Humboldt butter has a recognized excellence.

While the shipments of lumber have been the most important in the business of the port, the other products make no mean showing. In beef cattle, other live stock and animal products the shipments for the year 1905 amounted in value to $576,395, while the dairy products amounted to $1,335,850. Farm and ranch products amounted in value to $228,270, and those of the orchards $107,223. Fish products to the value of $78,643 were shipped out and $736,900 worth of miscellaneous products swelled the grand total to a most respectable sum for one county's shipments out of one of the most magnificent harbors on the coast of California.

Thirty-two thousand seven hundred and forty-eight passengers were on the vessels that passed over the Humboldt bar during the year 1905, and out of this number there was an excess of 1,860 arriving, showing an increase of population by sea by that number.

It may be said in conclusion that were this harbor placed anywhere on the Atlantic seaboard between Boston and Savannah, it would have received such attention from the natural government as would have made it one of the noted harbors of the country. It is commodious and safe, and with the completion of the transcontinental railways which are now looking to Eureka as a port, it will rank among the best harbors of the world.



BAY SCENE.

W. J. Kelley, of Geary & Kelley Boiler Works, has just returned to Ashtabula from Cleveland where he completed a big contract for the Standard Contracting Co., of Cleveland. The work consisted of repairing boilers and took Mr. Kelley two months.

Generated on 2024-08-28 13:26 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Photo by Crandall, reproduced by permission Jas. Maher.

VIEW OF PORTION OF DULUTH-SUPERIOR HARBOR. SHIP CANAL AT LEFT, THEN THE MAIN HARBOR AND SUPERIOR BAY, RICE'S POINT AND PART OF ST. LOUIS BAY AND CITY OF SUPERIOR.

COMMERCE OF DULUTH-SUPERIOR HARBOR, 1906.

The annual report of the commerce of Duluth-Superior harbor has just been issued by Major Graham D. Fitch, government engineer in charge of harbor improvements on Lake Superior. The report in part is as follows:

Total vessel freight received and shipped, 29,171,221 tons of 2,000 pounds, valued at $251,899,844.

Increase in freight tonnage over 1890, 924 per cent.

Increase in freight tonnage during the past year, 28.64 per cent.

It is impossible to give precise figures of the marine commerce of the principal ports of the United States for comparison with Duluth-Superior harbor, for the reason that at ocean ports of the United States as well as of foreign countries, no record of domestic tonnage is kept at the custom houses, whereas on the great lakes a record is kept of the total marine commerce, both foreign and domestic. In the principal ocean ports of the United States the tonnage of the local and coastwise (domestic) marine commerce is several times greater than that of the foreign.

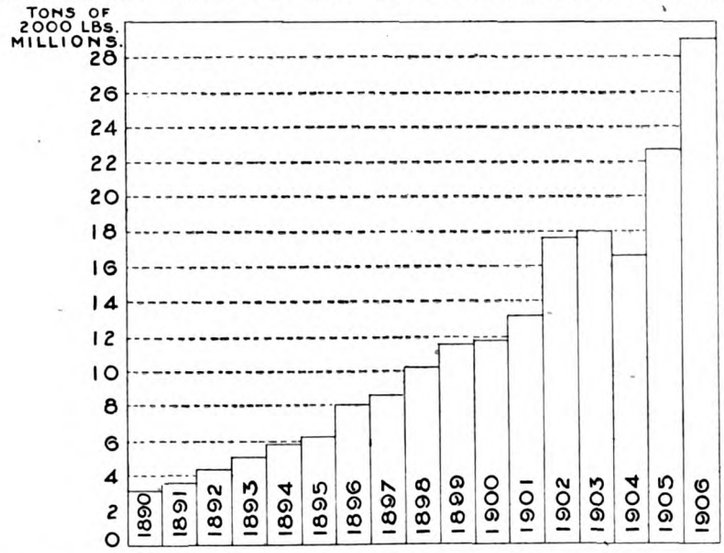


DIAGRAM SHOWING TOTAL AMOUNT OF FREIGHT RECEIVED AT AND SHIPPED FROM DULUTH AND SUPERIOR BY LAKE DURING THE CALENDAR YEARS 1890 TO 1906, INCLUSIVE.

Any comparison, therefore, of the relative marine commerce of lake and ocean ports, based solely upon custom house records is, for the reason stated, incorrect and misleading.

The navigation season for Duluth-Superior harbor averages only about eight months per annum, while for ocean ports naviation is carried on during twelve months. Considering the mean monthly freight movement during the season of navigation, Duluth-Superior harbor practically stands next to New York.

During the month of August a less amount of freight was received and shipped than during the preceding or succeeding month, contrary to custom for several years past. This was probably due to the fact that for four days during that month the wreck of the Interstate bridge prevented the movement of vessels to and from the iron ore docks, coal and lumber docks, entailing a loss in the movement of freight of probably 300,000 tons.

The navigation season covered a period of 253 days. This is reckoned from the first departure or arrival to or from the lower lakes. The open season for Duluth-Superior harbor to

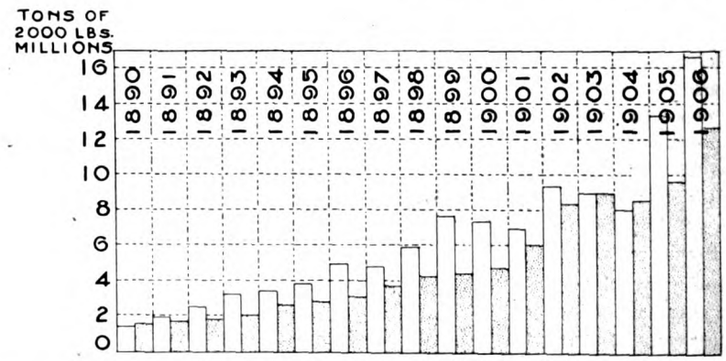


DIAGRAM SHOWING FREIGHT RECEIVED AT AND SHIPPED FROM THE HARBORS OF DULUTH AND SUPERIOR SEPARATELY DURING CALENDAR YEARS 1890 TO 1906. THE PLAIN BLOCKS REPRESENTING DULUTH AND THE DOTTED BLOCKS SUPERIOR FREIGHT.

Generated on 2024-08-28 13:29 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

and from Lake Superior ports only, was much longer, as some local boats ran all but one month of the year. The first boat departed for the lower lakes April 13 and the last boat arrived from the lower lakes Dec. 21. North shore boats were runnning at the close of the calendar year.

CONDENSED STATEMENT OF VESSELS RECORDED AT DULUTH-SUPERIOR HARBOR, 1895 TO 1906.

Year.	Total vessels entered.	Total registered tonnage.
1895	5,505	11,434,272
1896	5,527	13,353,068
1897	4.864	12,845,865
1898	5,519	14,135,237
1899	5,816	14,433,501
1900	5,725	14,387,068
1901	6,681	17,245,719
1902	7,944	23,811,275
1903	7,046	23,250,358
1904	5,851	19,879,783
1905	6,792	26,216,154
1906	7,426	32,842,351
Total	74,696	223,834,651

RECEIPTS, SHIPMENTS, AND VALUATIONS, DULUTH-SUPERIOR.

Year.	Total receipts and shipments. Tons.	Total valuation of receipts and shipments.
1895	6,325,351	$ 95,000,000
1896	7,886,833	111,676,900
1897	8,475,224	118,551,185
1898	10,127,261	142,643,020
1899	11,608,088	157,143,966
1900	11,725,245	135,109,196
1901	12,973,373	161,305,819
1902	17,505,793	194,444,695
1903	17,966,718	177,594,212
1904	16,617,017	157,233,209
1905	22,676,145	196,751,583
1906	*29,171,221	*251,899,844
Total	173,058,269	$1,899,353,629

*In addition to the above traffic for 1906, 26,900,000 ft. B. M. logs were received, valued at $403,500.

Capt. Francke, who commanded the steamship Dakota when she ran aground in Tokio Bay on the night of March 2, states that the accident to the Dakota was caused by the failure of the vessel to answer her helm, owing to the influence of new currents. He had changed her course three times without avail.

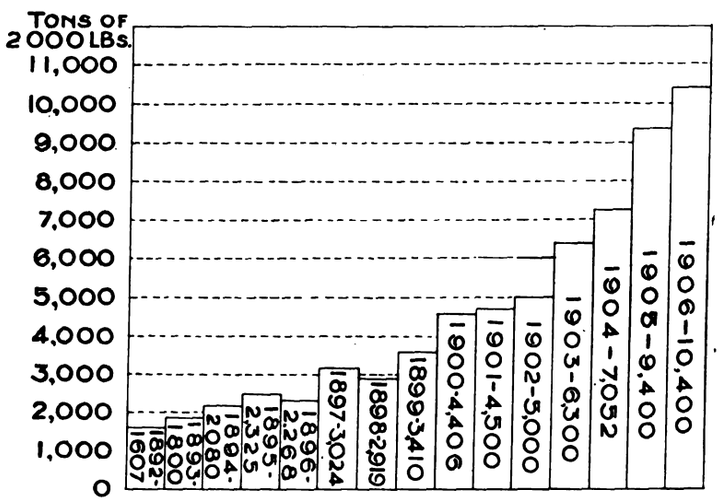


DIAGRAM SHOWING LARGEST SINGLE CARGOES PASSING THROUGH PORTAGE LAKE SHIP CANAL FOR THE CALENDAR YEARS 1892 TO 1906.

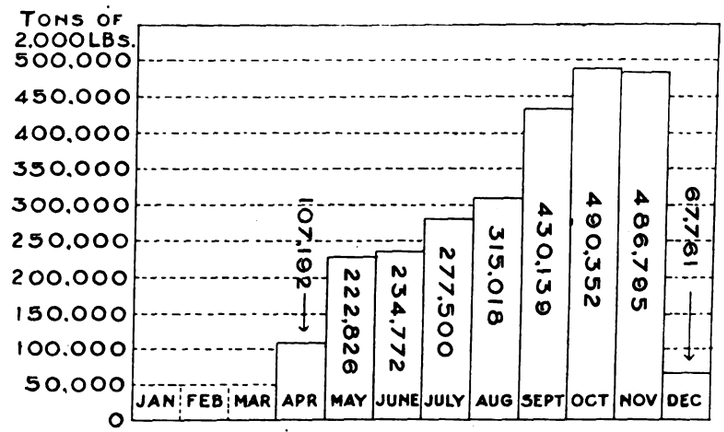


DIAGRAM SHOWING PASSAGE OF FREIGHT BY MONTHS UP AND DOWN THROUGH PORTAGE LAKE SHIP CANAL DURING CALENDAR YEAR 1906.

COMMERCE OF PORTAGE LAKE SHIP CANALS.

The annual report of Graham D. Fitch, major, corps of engineers, who is in charge of harbor improvements on Lake Superior, shows the Portage lake ship canals to be very busy waterways.

The diagram accompanying the report shows that the size of cargoes is increasing and there have been more of the larger class of vessels through this waterway than ever before.

The commerce on Lake Superior is heaviest during July and August, yet there is more freight going through the canals during October and November, or in the stormy season, than at any other time, which shows clearly the extent to which these canals are used for refuge.

The navigation season covered a period of 237 days, extending from April 18 to Dec. 10.

YEARLY SUMMARIES OF VESSELS AND FREIGHT, PORTAGE LAKE CANALS.

Year.	Number.	Total Freight.	Valuation.
1892	2,779	496,288	*$ 14,888,640
1893	2,365	532,628	*15,978,840
1894	3,282	754,973	*22,649,190
1895	3,448	923,756	29,832,368
1896	3,569	1,041,933	29,953,787
1897	2,931	1,020,723	34,044,269
1898	3,909	1,367,685	39,254,416
1899	3,931	1,582,169	54,994,844
1900	4,020	1,867,772	57,380,129
1901	3,921	2,114,385	56,876,481
1902	4,631	2,532,323	65,326,819
1903	4,434	2,420,848	65,073,319
1904	3,683	2,295,922	59,008,948
1905	3.757	†2,413,445	†79,869,500
1906	3,567	‡2,632,355	‡102,846,779
Total	54,227	23,997,205	$727,978,329

*Estimated.
†This does not include 9,893,000 ft. B. M. of logs, valued at $128,609, which item was included in previous years.
‡This does not include 5,603,000 ft. B. M. of logs, valued at $84,045.

Beginning on April 30 and continuing for about two weeks two submarine boats, representing different types of under-water craft, will contest off Newport for the $3,000,000 that has been appropriated by the government for building new submarines. The Electric Boat Co., which has absorbed the Holland interests, will enter as its champion the Octopus, a submarine of the now familiar Holland type. The other contestant will be the Lake, whose designer, Simon Lake, has for years had the ambition to make his craft demonstrate a superiority over the Holland boat. He has been quoted as saying that favoritism has been shown his rivals, and that like Hotchkiss and Maxim, he may have to go to other countries with his invention.

Another new Italian line has been formed, known as the Sicilian-American line, to operate fortnightly from Naples, Messina and Palermo. The company's steamers are the Italia, San Giorgio and San Giovanni, each of 6,500 tons register. The last two were built recently at Sunderland, England. The head office will be at Messina.

Generated on 2024-08-28 13:32 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

AGREEMENTS WITH LABOR.

All labor agreements aboard ship have now been concluded by the executive committee of the Lake Carriers' Association. Operating expenses will be somewhat higher than last year, as the wage schedule, which has been ascending regularly during the past few years, has met with a further increase. The wage schedule of the engineers was concluded early in February. While no direct advance was asked for by the engineers, operating expenses work out at a higher figure in the engine room, owing to the rearrangement in the classifications of the steamers. All steamers of over 5,500 gross tons register will carry three engineers, a chief at $175, a first assistant at $115, and a second assistant at $80. This was the same as last year, but two further divisions have been made in the first class, class B I and class B II. Class B I means all over 4,000 tons and under 5,500 tons gross register. Chief engineers in this class get $175 a month, and first assistants $115. The steamers in this class that are equipped with water-tube boilers and mechanical stokers carry a third engineer at $80 a month. Class B II bulk freighters include all steamers from 2,100 to 4,000 tons gross register. The chief engineers of this class receive $150 and first assistants $100. Such of these steamers as have water-tube boilers and mechanical stokers will carry a third engineer at $75.

Last week the executive committee of the Lake Carriers' Association closed contracts with the Lake Seamen's Union, the Marine Firemen, Oilers and Watertenders' Association, and the Cooks and Stewards' Union. The wages of the firemen, oilers and watertenders and wheelsmen and watchmen were increased $5 a month up to Oct. 1, making the rate $50 instead of $45. From Oct. 1 until the close of the season they will receive $65 per month, which is the same as last year. The wages of seamen were increased $2.50 per month, being $30 to Oct. 1 and $40 during the balance of the season. The cooks were also given an increase. Cooks on first-class steamers will receive $86 instead of $80, and second cooks $34 instead of $30. On second-class steamers cooks will receive $75 instead of $70, and second cooks $34 instead of $30. The wages of porters are advanced on all classes from $25 to $28. The wages of mates on steamers have been spontaneously marked up by the vessel owners $10 a month. The mates have no union. The following is the card of wages for 1907 as agreed upon by the Lake Carriers:

STEEL STEAMERS—FIRST CLASS.

	Per month.
Class A—See Note.	
Chief Engineers	$175.00
First Assistant Engineers	115.00
Second Assistant Engineers	80.00
Class B—See Note.	
Chief Engineers	150.00
First Assistant Engineers	100.00
Second Assistant Engineers	75.00
First Mates	125.00
Second Mates	86.00
Cooks, vessels over 4,000 gross tons	86.00
Second Cooks and Waiters, to Oct. 1	34.00
Second Cooks and Waiters, Oct. 1 to close of navigation	37.50
Porters, to Oct. 1	28.00
Porters, Oct. 1 to close of navigation	35.00
Firemen, Oilers and Water Tenders, to Oct. 1	50.00
Firemen, Oilers and Water Tenders, Oct. 1 to close of navigation	65.00
Wheelsmen and Lookouts, to Oct. 1	50.00
Wheelsmen and Lookouts, Oct. 1 to close of navigation	65.00
Ordinary Seamen, to Oct. 1	30.00
Ordinary Seamen, Oct. 1 to close of navigation	40,00

SECOND CLASS—CLASS C.

Chief Engineers	$125.00
Assistant Engineers	90.00
Chief Engineers, steel package freight steamers, 1,800 to 3,000 gross tons	150.00
First Assistant Engineers, steel package freight steamers, 1,800 to 3,000 gross tons	100.00
First Mates	108.00
Second Mates	75.00
Cooks, vessels less than 4,000 gross tons	75.00
Second Cooks and Waiters, to Oct. 1	34.00
Second Cooks and Waiters, Oct. 1 to close of navigation	37.50
Porters, to Oct. 1	28.00
Porters, Oct. 1 to close of navigation	35.00
Firemen, Oilers and Water Tenders, to Oct. 1	50.00
Firemen, Oilers and Water Tenders, Oct. 1 to close of navigation	65.00
Wheelsmen and Lookouts, to Oct. 1	50.00
Wheelsmen and Lookouts, Oct. 1 to close of navigation	65.00
Ordinary Seamen, to Oct. 1	30.00
Ordinary Seamen, Oct. 1 to close of navigation	40.00

THIRD CLASS—CLASS D.

Chief Engineers	$105.00
Assistant Engineers	75.00
First Mates	90.00
Second Mates (when carried)	60.00
Cooks	75.00
Second Cooks, to Oct. 1	34.00
Second Cooks, Oct. 1 to close of navigation	37.50
Firemen, Oilers and Water Tenders, to Oct. 1	50.00
Firemen, Oilers and Water Tenders, Oct. 1 to close of navigation	65.00
Wheelsmen and Lookouts, to Oct. 1	50.00
Wheelsmen and Lookouts, Oct. 1 to close of navigation	65.00
Ordinary Seamen, to Oct. 1	30.00
Ordinary Seamen, Oct. 1 to close of navigation	40.00

WOODEN STEAMERS—FIRST CLASS.

Chief Engineers	$125.00
Assistant Engineers	90.00
First Mates	108.00
Second Mates	75.00
Cooks	75.00
Second Cooks and Waiters, to Oct. 1	34.00
Second Cooks and Waiters, Oct. 1 to close of navigation	37.50
Porters to Oct. 1	28.00
Porters, Oct. 1 to close of navigation	35.00
Firemen, Oilers and Water Tenders, to Oct. 1	50.00
Firemen, Oilers and Water Tenders, Oct. 1 to close of navigation	65.00
Wheelsmen and Lookouts, to Oct. 1	50.00
Wheelsmen and Lookouts, Oct. 1 to close of navigation	65.00
Ordinary Seamen, to Oct. 1	30.00
Ordinary Seamen, Oct. 1 to close of navigation	40.00

SECOND CLASS.

Chief Engineers	$114.00
Assistant Engineers	84.00
First Mates	90.00
Second Mates (when carried)	60.00
Cooks	75.00
Second Cooks and Waiters, to Oct. 1	34.00
Second Cooks and Waiters, Oct. 1 to close of navigation	37.50
Firemen, Oilers and Water Tenders, to Oct. 1	50.00
Firemen, Oilers and Water Tenders, Oct. 1 to close of navigation	65.00
Wheelsmen and Lookouts, to Oct. 1	50.00
Wheelsmen and Lookouts, Oct. 1 to close of navigation	65.00
Ordinary Seamen, to Oct. 1	30.00
Ordinary Seamen, Oct. 1 to close of navigation	40.00

BARGES.

Mates on barges shall receive not less than ten dollars ($10) per month more than seamen on the same vessel; and donkey men five dollars ($5) per month more than seamen.

Mates' wages on tow barges of the larger class (vessels which paid their mates $70.00 a month last year) shall be $70 per month for the entire season.

Able-bodied seamen on tow barges shall receive fifty dollars ($50) per month until Oct. 1, and sixty-five ($65) per month from Oct. 1 to the close of navigation.

The engineers on tow barges carrying towing machines shall receive $70.00.

The cooks on tow barges shall receive the same wages as the seamen on the same barges.

NOTE.

Class A—All steamers over 5,500 tons.

Class B I—All bulk freight steamers of 4,000 tons and less than 5,500. Bulk freight steamers of 4,000 to 5,500 tons carry third engineer only when equipped with water-tube boilers and mechanical stokers.

Class B II—All bulk freight steamers of 2,100 tons and less than 4,000 tons, and steel package freight steamers over 3,000 gross tons government register. Steel bulk freighters of this class carry third engineer only when equipped with water-tube boilers and mechanical stokers.

Class C—All steamers of 500 tons and not included in classes A and B.

Class D—All steamers under 500 tons.

Wages of seamen, firemen, oilers and water tenders employed in fitting out shall be $2 per day while they are not boarded on the vessel.

ENLARGING COLLINGWOOD PLANT.

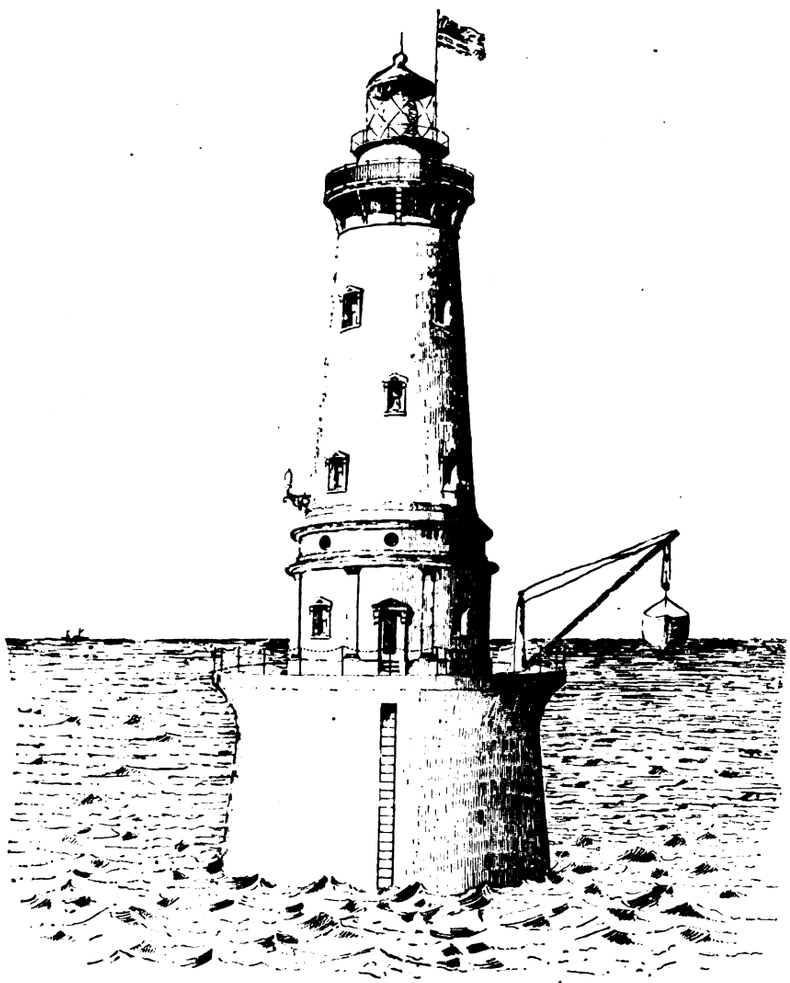
At a meeting of the board of directors of the Collingwood Ship Building Co., held on Wednesday, April 10, it was decided to start at once on the building of a large stone and cement dry dock capable of docking the largest boat on the lakes. This dry dock will be about 750 ft. long, 90 ft. wide, with a gate of 75 ft. width. A building berth will also be laid down suitable to building vessels up to 750 ft. in length. This extension will be to the west of the present site. There will also be a new steel punching shed with traveling gantry crane, commanding both the shed and the building berth. There will also be a traveling gantry crane placed on the west side of the present dry dock. These cranes will be similar to the new gantry crane now nearing completion to the east side of the dry dock. The present buildings will also be extended somewhat and tool equipment increased.

The Robert Fulton Monument Association announces that preparations are practically complete for a great water parade in Hampton Roads, in connection with the Jamestown Exposition, on Sept. 23, to celebrate the sailing of the Clermont on its eventful trip from New York to Albany on Aug. 11, 1807.

Generated on 2024-08-28 13:25 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

ROCK OF AGES LIGHT STATION.

The Rock of Ages Light Station will, when completed, be one of the most important aids to navigation on Lake Superior, for the reason that when a N. W. wind or gale is blowing, vessels will be protected by the shore from Duluth to the east end of Isle Royale. The light will guard a dangerous group of rocks and shoal spots at the westerly end of Isle Royale. The rocks are in reality one rock with three high projections, and is appropriately called the Rock of Ages.



PROPOSED LIGHTHOUSE ON ROCK OF AGES.

The light station will be located on the northeast one of these three rocks, about 2½ miles west of Washington Island. Its width is about 50 ft. and length about 210 ft., the highest point of the rock being 16 ft. above mean lake level.

A portion of the rock will be cut down to 1 ft. above mean low water and leveled to fit the base of the foundation pier, which will be cylindrical in form, 50 ft. in diameter and 30 ft. high, with a flare at the top. It will be built of concrete incased in a steel shell of ⅜-in. steel plate, securely anchored to the rock with bolts at 3 ft. apart along the circumference of the shell. In the center of the pier provisions will be made for a cellar and sub-cellar for provisions, oils and fuel.

The tower, 30 ft. diameter at the base, is concentric with the foundation pier and rises above the top of the pier to a total height of 125 feet above lake level. It is of fire-proof construction, with steel-cage framework, and stone-trimmed brick walls, 30 in. thick at the base. Above the second story the tower is conical in shape up to the watchroom gallery, where an offset is made to a cylindrical cast iron watchroom and second order lantern.

The treatment of the tower and foundation pier is necessarily simple on account of its exposure to seas and ice. There are seven floors above the top of the pier, all utilized for the various purposes of the light station; the engine room for the operation of the fog signal plant, which will consist of two 24-H. P. oil engines with air compressors, is on the first floor. The compressed air will be carried to a 6-in. improved siren, actuated by an automatic device giving the station its distinctive characteristic.

The remaining apartments will consist of an office, kitchen and mess room, quarters for four light keepers, watchroom and service room.

The illuminating apparatus will be a powerful "lightning light" lens apparatus, its characteristic being a double flash every 10 seconds and visible, under ordinary conditions of the atmosphere, for a distance of 21 miles. The rapidity with which these powerful groups of two flashes follow each other allows bearings to be readily taken, and gives this station a characteristic entirely new upon the great lakes.

Congress has appropriated $125,000 for the establishment of the Rock of Ages Light Station, and work on the construction will be begun about the middle of May, by day's labor, under the direction of Major Charles Keller, Corps of Engineers, U. S. A., Engineer 11th Light-House District.

DEPTHS OF WATER.

The following tables contain the monthly average depths in feet at the Lime Kiln crossing for 1906, as well as the monthly average depth of water in the Poe Lock:

LIME KILN CROSSING.

April	18.6
May	18.9
June	19.1
July	19.2
August	19.2
September	18.9
October	18.6
November	18.5
December	18.7

POE LOCK.

April	20.17
May	20.25
June	20.53
July	20.68
August	20.68
September	20.54
October	20.32
November	20.12
December	20.17

There is now being built at Boston a hydroplane of unique type that is expected to attain a speed of thirty miles an hour. The boat is only 14 ft. long and weighs only 145 lbs., so that it could be readily lifted from the water and carried by its owner. It has four feet beam and is to be equipped with a 35-H. P. engine, while the total depth of the hull is less than a foot.

A new record is believed to have been established in the construction of the collier Vestal at the Brooklyn navy yard, and it is believed that she will be completed well within the specified time.

Generated on 2024-08-28 13:27 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

THE MARINE REVIEW

DEVOTED TO EVERYTHING AND EVERY INTEREST CONNECTED OR ASSOCIATED WITH MARINE MATTERS ON THE FACE OF THE EARTH.

Published every Thursday by

The Penton Publishing Co.

CLEVELAND.

BUFFALO ..... 932 Ellicott Sq.
CHICAGO ..... 1362 Monadnock Blk.
CINCINNATI ..... 124 Government Place.
NEW YORK ..... 150 Nassau St.
PITTSBURG ..... 521 Park Bldg.
DULUTH.

Correspondence on Marine Engineering, Ship Building and Shipping Subjects Solicited.

Subscription, $3.00 per annum. To Foreign Countries, $4.50.
Subscribers can have addresses changed at will.

Change of advertising copy must reach this office on Thursday preceding date of publication.

The Cleveland News Co. will supply the trade with the MARINE REVIEW through the regular channels of the American News Co.

European Agents, The International News Company, Breams Building, Chancery Lane, London, E. C. England.

Entered at the Post Office at Cleveland, Ohio, as Second Class Matter.

April 25, 1907.

NEED OF A MERCHANT MARINE.

The American consul-general at Singapore has recently made a report to the department of commerce and labor throwing much light upon a state of affairs in that hemisphere which is inimical to American trade, and making valuable suggestions as to how to remedy the existing conditions. He says that shipments of all products from the Atlantic coast ports of the United States to and from Oriental ports via the Suez canal are controlled by slow and irregular steamship lines under foreign flags.

All shippers of East India products to Atlantic ports in the United States, where 90 per cent of all such shipments go, are forced to ship by lines in the combine on account of the rebates and conditions. At the end of every six months all shippers who have not patronized vessels of lines outside the conference are entitled to a rebate, according to a circular which was sent to shippers of Straits produce by an agent of one of the lines in the combine.

By the conditions imposed in the circular, at the end of a year it results in a rebate of 10 per cent on shipments for the first six months, 5 per cent on those of the second six months, and a credit of 5 per cent for the same period, which is no doubt held back as additional means to compel shippers to remain faithful and patronize no vessels outside of the combine. All shippers of produce, outside of those who are agents for the vessels which are in the combine, would no doubt welcome a fast regular line through the Suez canal to New York. But such a line must be independent of any combination and furnish sailings sufficiently frequent to guarantee shippers that all their cargo will be taken care of before they dare break away from the combine. American trade throughout India and this part of the world has been seriously handicapped for years by the slow, irregular and unsatisfactory shipping facilities.

It is sufficient to say in any case they can be delivered by the fast regular lines from England and the Continent in less than half the time it takes from New York, and, on account of these regular lines from Europe, a representative can ordinarily guarantee deliveries of goods which are held in stock. Even the present high conference rates from New York to Manila are no more than the bare water rate from San Francisco, leaving out the cost of transportation to San Francisco by rail from the east and middle west and not considering the liability of breakage at transfer points on the Pacific route.

He says:

"What is absolutely necessary in order to build up American trade east of Suez is the establishment of a regular fast American line of steamships from New York to Manila, stopping at Indian ports, Penang and Singapore, connecting here with the vast number of coast lines running to Siam, Java, Sumatra, Borneo and the other islands of the Netherlands and southern Philippines. Foreign capital will not give us such a service with which to build up American trade, but will give us all of the present service necessary in order to hold the business and prevent the establishment of a regular American line to promote the sale of American products and manufactured goods in this part of the world. The time will come when a share of this trade will be needed as an outlet for our fast-increasing production. Facilities must be provided to compete with other countries, and transportation is one of the most important. Resident American representatives are also needed, but the present transportation facilities offer little encouragement to manufacturers and producers to locate men in a field where such an obstacle exists."

A report from the United States consul at the port of Glasgow reveals the same startling conditions in regard to the dearth of American carrying facilities, notwithstanding the enormous amount of commerce between Glasgow and this country. His report states that the wonderful trade enjoyed by Glasgow in distant lands owes its success to the thousands of steam and sailing vessels which enter every port in the world laden with Scotch and English made goods. Glasgow's direct steamship lines give its exporters and manufacturers the cheapest and most direct transportation between the local factories and all foreign markets. This is an advantage which the United States manufacturers do not enjoy, and they will never be on an equal footing with their foreign competitors until a merchant marine of its own is secured. The foreign manufacturer does not fear competition from his American rival so long as he has the advantage of thousands of passenger and cargo steamers on his side, and his commercial competitors are without the means of meeting him in the distant ports and markets of the world.

Not a vessel entered the harbor of Glasgow during the year 1906 flying the flag of the United States. The records for six years past disclose the astonishing fact that while 1,130 loaded ships sailed from Glasgow to the United States, every one of them carried a foreign flag. The local market value of the goods carried on these vessels to the United States in the six years amounted to $37,016,949. This does not include an average annual passenger list of 25,000 persons. As the value of the importations from the United States into Glasgow exceeds the exports, the foreign vessels leaving this port carried freight valued at over $37,000,000 and returned with

Generated on 2024-08-28 13:27 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

cargoes the estimated cost of which in America was no less than $50,000,000. A merchant marine is not only imperatively needed now, but without it the Panama canal will be of far greater service to foreign manufacturers, exporters, and the great shipping world of the old country than it will be to the great republic which will build and own it.

FORCING A PASSAGE.

Capt. W. W. Smith, marine superintendent of the Pittsburg Steamship Co., left Cheboygan Wednesday morning in the ice crushing steamer Algoma with instructions to force a passage from Detour to Sault Ste. Marie through the ice. At the same time the whaleback steamers Cort and Neilson, belonging to the fleet of the Pittsburg Steamship Co., left the lower lakes for Detour to assist in breaking a passage through. The cost of this service will be paid by the Lake Carriers' Association and borne by the vessels benefited pro rata. This is similar to the agreement made last year when the passage was forced by the vessel owners. The determination of forcing the passage was reached by a meeting of vessel owners on Tuesday when reports were received from Sault Ste. Marie that the ice was 20 in. thick, with little prospect of a natural passage opening within eight days. As there is an immense volume of freight to be moved, and as all contracts of labor have now been concluded, owners are anxious to begin the season.

The ice crushers succeeded in breaking open the channel in St. Marys river on Wednesday and the fleet which had been detained at Detour moved in single file up the river. The steamer Wm. A. Paine of the Hutchinson fleet was the first to be locked through at the Sault. The Paine made a remarkable record. She was not among the waiting fleet at Detour. She had been the first boat to reach the ore docks at Escanaba, and had delivered a cargo of ore at Erie. She left Erie on Saturday last and reached Detour shortly before the ice crushers opened the channel. In fact, under her regular schedule she could not have made the trip more than four hours quicker.

A general start has now been made from all along the line, vessels leaving Chicago and Duluth, as well as lower lake ports. There may yet be some little trouble in Whitefish bay, but it cannot last long.

NAVIGATING THE LIME KILNS.

There is a strong cross current at the Lime Kiln Crossing and navigators are advised to proceed with caution. It is not safe for boats to attempt to pass each other in the westerly 300 ft. The vessel owners met on Wednesday to consider the subject and adopted the following resolution:

"It is the sense of the meeting, after having conferred with a number of captains who have already passed over the Lime Kiln Crossing, that it is not safe for boats to pass each other in the westerly 300 ft. of the Lime Kiln Crossing and we believe that the interests of navigation will be best served by the discontinuance of the work at least on half of the channel, so as to make this available for upbound boats. If this cannot be done, we recommend that the Lake Carriers' Association inaugurate a patrol system for navigating this part of the river so as to prevent boats from passing each other in this dangerous channel."

The sense of this resolution was wired to President Livingstone, who immediately arranged with the government officials to occupy only one-half of the easterly channel, namely 150 ft., and that the remaining 150 ft. should be used exclusively by upbound boats. This easterly channel will be immediately staked by President Livingstone. When this is completed the channel at the Lime Kiln Crossing will be as follows: 300 ft. on the westerly side will be used exclusively by downbound boats; the dredges will be working on the adjoining 150 ft., and the remaining 150 ft. on the easterly side will be properly staked to be used by upbound boats.

The easterly channel has been buoyed as follows: At the lower entrance on the westerly side a white light over a red light, next two stakes on the westerly side showing a white light; the last stake at the upper end on the westerly side, a white light over a red light. The range lights for navigating this channel are a green and white light placed as follows: The upper light, a white light, placed on the bank abreast of the Texas dock. The lower light, a green light, 500 ft. south, abreast of the Old Michigan Central dock. Hereafter the water signals at Elliott's Point will show the depth of water in the easterly channel for upbound boats, and the water signals on Smith's coal dock will show the depth of water in the westerly channel for downbound boats. Upbound boats will use the easterly channel, downbound boats the westerly channel.

There is printed as a supplement to the MARINE REVIEW this week the official chart of the Lake Carriers' Association showing exactly the position of the buoys and lights at the Lime Kiln Crossing for the season of 1907.

IRON SITUATION.

Owing to the slow manner in which the navigation of the great lakes is opening because of the unfavorable weather, it is expected that ore on docks by May 1 will be unusually small. The movement of ore from docks to furnaces is now proceeding rapidly, and it is not expected that any considerable tonnage to replace stocks will be delivered at Lake Erie ports prior to May 1. Buying of steel-making iron during the past week has continued in the central west. Sales of Bessemer in the Pittsburg district amounted to about 28,500 tons, and it is evident that the supply of this grade in the valleys for the remainder of the year will not be much more than the pending inquiry. Prices are firm. The Carnegie Steel Co. has opened the cotton tie market at an advance of 10 cents per bundle over last year's price of 85 cents. Following the announcement of the Steel Corporation that it was willing to receive orders for steel rails for 1908 delivery, similar public statements have been made by other interests. In structural material the market has shown a marked improvement in the past two months, and the mills are now crowded with specifications. Heavy premiums are being paid for prompt delivery of plates and the demand continues heavy. Similar conditions prevail in regard to sheets. Iron and steel bars continue in good demand.

At the annual meeting of the stockholders of the Joseph Dixon Crucible Co., the old board, consisting of Edward F. C. Young, John A. Walker, Edward L. Young, William Murray, George T. Smith, Joseph D. Bedle and George E. Long, was unanimously re-elected. The board of directors re-elected the former officers, namely, E. F. C. Young, president; John A. Walker, vice president and treasurer; George E. Long, secretary. Judge Joseph D. Bedle was also re-elected as counsel. The stockholders present expressed themselves as thoroughly satisfied with the management of the company by its officers. Of the total number, 7,345 shares, there were represented 6,460 shares.

Generated on 2024-08-28 13:26 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

AVERAGE TIME IN PORT.

The MARINE REVIEW has been asked this question: "What is the average stay in port of all ore carrying steamers?"

It is fair to take the figures compiled by the Pittsburg Steamship Co. to answer this question, as this company through its own vessels and chartered ships moved considerably more than half the total movement of ore on the lakes during 1906. The average stay at the lower lake ports of all these ships was 36 hours and 15 minutes. This includes holidays and Sundays and represents the actual average time that vessels were in port. This of course includes unloading time and time spent in port waiting to unload. The average time spent by all these ships at the loading ports was 22 hours and 23 minutes. Therefore 58 hours and 38 minutes represents the actual average time spent by this fleet in port receiving cargoes and discharging them. The average cargo carried by these vessels was 5,954 tons. The largest cargo carried was 13,333 tons by the Henry H. Rogers from Escanaba to South Chicago, drawing 21 ft. forward and 21 ft. 8 in. aft. The largest cargo carried from Lake Superior was 11,836 gross tons, from Ashland to South Chicago by the J. Pierpont Morgan, drawing 19 ft. 6 in. forward and 20 ft. aft. The record for dispatch in loading was made at Mesabi dock No. 4 at Duluth, Sept. 30, when 9,277 tons were put aboard the steamer E. J. Earling in 70 minutes, being at the rate of 7,988 tons per hour. The Earling was in port upon this occasion a total of 2 hours and 15 minutes. The unloading record is held by the steamer George W. Perkins which discharged 10,346 gross tons at Conneaut in 4 hours and 10 minutes actual working time.

AROUND THE GREAT LAKES.

Capt. J. L. Bradshaw, master of the steamer John W. Moore, cleared from Ashtabula with the first load of Lake Superior coal.

The Merchants' Montreal line which operates the steamers City of Montreal and City of Ottawa will open the season April 25. W. J. Farrasy is Cleveland agent.

Sailors for either end of a boat are scarce at Ashtabula. There are only eight boats in the winter fleet, but there has been difficulty in getting men for them.

The Canadian Dock & Bridge Build-

APPOINTMENTS OF MASTERS AND ENGINEERS.

		CAPTAIN.	ENGINEER.
		THE GILCHRIST TRANSPORTATION CO., CLEVELAND, O.	
Str.	Case	C. S. Ellis	Frank Hawthorne
"	City of Genoa	B. F. Ogden	Walter Patterson
"	City of Naples	Fred Hasenflue	Lewis Fittinger
"	City of Rome	Paul Gutch	Marcus Hill
"	Colonial	William F. Morrison	Carl Becker
"	Cumberland	W. S. Richie	William J. Nolan
"	C. A. Eddy	Out of Commission	
"	C. W. Elphicke	G. Atkinson	Peter Britz
"	Gen. Garretson	C. T. Gunderson	H. L. Mitchell
"	Gilchrist	Stanton Markle	W. T. Schwacofer
"	J. C. Gilchrist	A. M. Shepard	John Parks
"	F. W. Gilchrist	Charles Hinslea	Henry Jesson
"	C. C. Hand	George Dupuie	F. O. Burrows
"	John Harper	A. D. Vorce	A. L. Millet
"	F. W. Hart	R. J. Walder	C. J. Erickson
"	F. J. Hecker	J. C. Byers	A. L. Hatch
"	Helena	C. C. Stewart	William Sicken
"	Hiawatha	T. J. Moran	C. T. Martin
"	R. L. Ireland	J P. Minskey	James S. Balfour
"	Jupiter	J B. Lyons	T. F. Higgins
"	Lake Shore	Duncan Buie	George Zanger
"	Lansing	G. McDonald	J. R. Engert
"	Mars	John Smith	Porter Robertson
"	H. P. McIntosh	W. G. Stewart	A. F. Hogle
"	Massachusetts	D. B. Elsey	Gordon Potter
"	Thomas Maytham	M. J. Madden	Daniel Flint
"	Mecosta	W. H. Stern	Nelson Lockhart
"	Merida	Frank Ott	Charles Burns
"	Merrimac	John Randall	F. Ouellette
"	Neosho	Andrew Cowie	Calvin Hatch
"	Neptune	F. Dupuie	Otto Esholz
"	Neshoto	Arnold Evenson	August DeMar
"	Alex. Nimick	Frank Bertrand	D. M. Foster
"	E. W. Oglebay	Nelson Brown	Thomas Harringer
"	Olympia	A. W. Holmes	Peter LaMar
"	F. M. Osborne	M. H. Clark	William Brake
"	R. R. Rhodes	J. F. Mackin	Guy Squire
"	G. H. Russell	Charles Hahn	John Maher
"	Saturn	W. H. Landgraf	D. T. Brown
"	E. N. Saunders	W. G. Rogers	Martin Mitchell
"	R. E. Schuck	G. L. Cudeback	Joseph Berney
"	John Sherwin	G. L. Goodell	F. A. Francombe
"	H. S. Sill	Alex Clark	Thomas Burns
"	Steel King	W. F. Delaney	Burt Beauchamp
"	Tacoma	John Lohr	Peter Robertson
"	C. Tower	F. S. Ellis	E. Ellsworth
"	Uranus	Charles Caughell	T. F. Birch
"	Venus	Pierre Bouille	John Conley
"	Vermillion	Hugh McCann	George B. Eaton
"	Volunteer	Richard Call	H. W. Barden
"	Vulcan	James Bucanan	Robert Dornan
"	P. G. Walker	Ben Moshier	John Seymour
"	Wallula	W. M. Bosthwick	Thomas Morrill
"	C. W. Watson	Ed Mooney	L. J. Mannion
"	J. L. Weeks	Peter Full	R. H. Reynolds
"	D. C. Whitney	L. Miskin	Marcus M. Barns
"	D. M. Whitney	W. C. Butts	C. A. Francombe
"	G. F. Williams	H. Bennett	Harry Stone
"	J. B. Wood	Everett Ennes	John C. Fritz
"	L. Woodruff	Thomas Gibson	A. McLaren
"	A. P. Wright	B. McGregor	August Lembke
Bge	Antrim	F. E. Johnson	William Marshall
"	F. A. Georger	W. R. Newton	
"	Magnetic	S. Minskey	
"	Twin Sisters	A. J. Monroe	
"	Tyrone	R. E. Johnson	John Nugent
		DEARBORN TRANSIT CO., DEARBORN, MICH.	
Str.	E. T. Wallace	John McAlpine	John Geunichord
		H. N. LOUD, AU SABLE, MICH.	
Str.	Badger State	William Brooks	Edward Taubert
"	John B. Ketcham, 2d	Charles Barnes	A W. Carlisle
"	Kongo	A. H. Shafer	Robert Elliott
		F. M. OSBORNE, M. O., CLEVELAND, O.	
Str.	John W. Moore	J. L. Bradshaw	
"	Louisiana	J. H. Buchanan	
		PRINDEVILLE & SONS, MGRS., CHICAGO, ILL.	
Str.	Alva	John Madden	C. Castle
"	Jesse Spalding	James Travis	Fred Otto
		SANDUSKY LUMBER & BOX CO., SANDUSKY, O.	
Bge	Charles Wall	Andrew Haganey	

Generated on 2024-08-28 13:28 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

APPOINTMENTS OF MASTERS AND ENGINEERS.

		CAPTAIN.	ENGINEER.
		GEORGE NESTER, DETROIT, MICH.	
Str.	Schoolcraft	Joseph Bourassa	Freeman Briggs
Bge.	George Nester	George De Beau	
"	Mary N. Bourke	Phil. Heppner	
		F. E. HALL & CO., MONTREAL, QUE.	
Str.	Ralph T. Holcomb	John A. Smith	Napoleon Lazure
"	Iona	Louis Daigneault	George Johnson
Bge	G. H. Warmington	Ben Bowen	
Str.	(Now building)	To go into commission in July	
		L. S. SULLIVAN, MGR., TOLEDO, O.	
Str.	Portage	William J. Cowles	J. W. Kennedy
Str.	David W. Rust	N. A. Cuthbert	Charles Robbins
Bge.	C. C. Barnes	G. E. Nelson	
Sch.	George G. Houghton	George C. Shirley	
"	John Schuette	John O. Johnson	
		L. S. SULLIVAN, MGR., TOLEDO STEAMSHIP CO., TOLEDO, O.	
Str.	Eugene Zimmerman	F. F. Cody	James D. Stewart
		A. J. HENRY, MICHIGAN CITY, IND.	
Str.	J. D. Marshall	A. C. Wanwig	Christ Dahl
		W. J. BASSETT, COLLINGWOOD, ONT.	
Str.	Wexford	W. J. Bassett	J. Allen-Nicoll
		M. A. BRADLEY, CLEVELAND, O.	
Str.	George Stone	Paul Howell	John E. Dalton
"	Gladstone	M. Mulholland	H. Thrun
"	R. P. Ranney	Paul V. Howell	C. B. Keeler
Bge.	Adriatic	C. Anderson	
"	M. B. Grover		
		W. E. DONELY, SAGINAW, MICH.	
Bge.	Katie Brainard	William Haggerty	
"	A. C. Maxwell	A. M. Carpenter	
		WALTER K. FULLUM, BUFFALO, N. Y.	
Sch.	James G. Blaine	Walter K. Fullum	
		F. W. GILCHRIST, SAGINAW, MICH.	
Str.	Viking	John Place	George Barr
"	S. C. Hare	Thomas Lillis	A. J. Schmidt
		POTTER-TEARE & CO., CLEVELAND, O.	
Str.	Mary A. McGregor	Henry Brock	William Griffith
		MACLACHLAN TRANS. CO., PORT HURON, MICH.	
Str.	C. F. Bielman	J. T. Hanson	William Pilkey
Bge.	Mary E. MacLachlan	Thomas Leisk	
		MONTREAL TRANSPORTATION CO., MONTREAL, QUE.	
Str.	Westmount	Alex Milligan	William Newbold
"	Fairmount	P. C. Telfer	J. W. Taylor
"	Rosemount	John Wood	Richard Taylor
"	Glenmount	Capt. Muir	
"	Stormount	Capt. McMaster	
"	Advance	William Daoust	William Spencer
"	Emerson	William Murphy	George Henderson
Bge	Hamilton	J. Hurley	
"	Quebec	C. Sauve	
"	Melrose	George Horne	
"	Ungava	James Kirkwood	
		EDWARD HINES LUMBER CO., CHICAGO, ILL.	
Str.	L. Edward Hines	D. R. Parsons	James Byers
"	L. L. Barth	James Heffernan	Reuben Ellis
"	Trude R. Wiehe	Jay Jennings	Charles McElroy
"	W. H. Sawyer	M. Canartney	
"	Cormorant	K. McKenzie	Theo. Brinker
"	Oscoda	W. J. McKay	Edward Knibbs
"	Louis Pahlow	James Carr	Hiram Fuller
Bge.	Ashland	Eli Jacques	
"	Lizzie A. Law		
"	A. C. Tuxbury	Peter Ward	
"	C. E. Redfern	W. P. Johnson	
"	Selden E. Marvin	Fred Anderson	
"	Alice B. Norris	Horace Acree	
"	S. J. Tilden	Capt. Sorenson	
"	Ida Corning	P. H. Edgar	
"	D L. Filer	L. Madsen	
"	Helvetia	George Bailey	
"	Delta	John Bates	
"	City of Chicago		
		ONTARIO & QUEBEC NAV. CO., LTD., PICTON, ONT.	
Str.	Alexandria	E. B. Smith	T. J. S. Milne
"	Porter	M. Hefferman	Lew Smith
"	Aberdeen	M. Hicks	Emery Scott
"	Water Lily	William Dalmage	Peter Davis
"	Niagara		
Bge.	Isabel Reed	T. Bennette	
"	Rob Roy	S. Le Boeuf	

ing Co.'s pile driver No. 1 engaged in work on the Grand Trunk slip at the foot of San Antoine street sank at her mooring last week.

Capt. Sam W. Gould, Astabula shipping master, is back on the job for the season of 1907. Capt Gould taught navigation theories to a big bunch of sailors during the winter.

H. C. Burrell of Lorain, one of the owners of the steamer Frontenac, running between Holland, Mich., and Chicago, is contemplating starting a line from Cleveland to Saginaw and Bay City.

Capt. Sam B. Massey, master of the steamer Dan R. Hanna, owns a farm on Grenadier Island for which he has refused $15,000. His aged mother lives there and as long as she lives, he says he won't sell.

The first iron ore cargo of the season to be delivered at South Chicago was taken there by the steamer James S. Dunham. It consisted of 8,000 tons, was loaded at Escanaba and was consigned to the Illinois Steel Co.

An ice crushing tug to be a duplicate of the James R. Sinclair will be built at the Buffalo yard of the American Ship Building Co. for the Great Lakes Towing Co. The tug will be 78 ft. over all, 68 ft. keel, 17 ft. beam and 10 ft. deep.

The steamer Tuscarora of the Lehigh Valley line, broke her propeller in endeavoring to navigate the ice fields between Buffalo and Ashtabula. As she has a cargo of coal aboard, she will be towed to Chicago by the steamer Bethlehem.

The life saving crew of Sleeping Bear Point succeeded in rescuing the steamer Eliza Day, which capsized off Pyramid Point last week. They succeeded in righting the steamer after two days' effort. The vessel was pumped out and repaired for its trip to Chicago with its cargo of lumber.

H. H. Collins of St. Catherines has been appointed as commissioner to conduct the investigation of the charges made against Capt. Dunn, commander of the government cruiser Vigilant by Capt. J. H. Ingster of Goderich in consequence of which the former has been suspended. The inquiry will be held at Windsor.

Arthur May, master, and Anthony Ward, chief engineer, of the steamer H. B. Hawgood, look so much alike that when they struck Ashtabula recently, there were all sorts of complications trying to tell them apart. Even to the sandy mustaches, they are like two peas in a pod. Capt. May lives at Port Huron and Mr. Ward at Lorain.

Generated on 2024-08-28 13:29 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

LEGAL PHASES OF NAVIGATION

At the annual meeting of the Pittsburg Steamship Co.'s captains, Mr. Hermon A. Kelley, general counsel, addressed the masters at the suggestion of Mr. Coulby, president and general manager, upon the legal phases of navigation. This address was so well thought of by Mr. Coulby that he caused a limited edition to be printed of it for distribution among his own interests. With his permission the MARINE REVIEW publishes it herewith as it contains a great deal of information of value to all masters and owners.

It is now nearly ten years since I was asked by Mr. Coulby for the first time to appear before a meeting of the masters of the old Minnesota Steamship Co. and offer some suggestions upon the legal phases of navigation. I remember at the time having serious doubts in my mind just how appropriate it was, and how much good it would do for a lawyer to attempt anything like counsel or instruction to a body of experienced navigators in matters pertaining to their own profession.

The same request has come to me almost every year since then, and as I have attended these meetings and listened to the interchange of ideas between those connected with the different departments of the great enterprise which we are all jointly carrying on, my doubts upon this subject have disappeared, and I have become thoroughly convinced that there is no better way to secure a good understanding and effective co-operation than to get together once in a while and compare our experiences.

Each of us looks at a thing from his own standpoint. You see the effect of failing to blow a certain signal from your pilot house; I see it from behind the trial table; Mr. Coulby sees it through the hole it makes in his treasurer's report. Each of us needs to look at the matter from the points of view of the others. We can only do this by discussing it among ourselves.

SUCTION.

I remember one of the first texts I ever took for one of these talks. It was suction. The famous old Siberia-Ohio-Mather case was then fresh in everyone's mind. The collision involved in that case occurred in 1890, and was the first instance of very heavy damage caused by suction. Strange as it may seem to the younger masters now on the Great Lakes, the subject of suction was then so little understood that there was the greatest dispute among the witnesses at the trial in the District Court as to the manner in which it would operate, and there were masters who even denied its existence. Shortly after the final decision of the case in the Circuit Court of Appeals, which was in 1898, a number of disastrous collisions occurred, nearly every one of which was due to suction. Among these cases many of you will remember the Fontana, the Martha and the Ed. Smith-Aurania-Mesaba. In the light of these and similar disasters, I remember speaking in the strongest terms at a meeting of masters, condemning the practice of attempting to pass other vessels going in the same direction in narrow waters, when any third vessel was liable to be in the vicinity at the time of the passing.

One of the masters got up in the meeting, after I had finished, and asked with considerable heat, whether he was to understand that the management wanted him to stay behind every lumber hooker in the rivers. He said he thought his owners wanted him to "make time," and if he was not to pass other vessels going in the same direction, he thought he should probably "hear something drop."

A general discussion followed, in which, as I recollect, Mr. Coulby himself took part. As a result of that discussion, I believe that every man present got a pretty clear idea of when he ought and when he ought not to attempt to pass another vessel going in the same direction in narrow or shallow waters, where suction was likely to operate.

Mr. Coulby made it very plain that he did not wish any of his masters to assume the slightest risk in passing another vessel for the sake of gaining time, and it was finally agreed on all hands that as a general rule in passing up and down the rivers and shoal waters such as Lake St. Clair and parts of Mud Lake, no attempt should be made to pass another vessel at close quarters going in the same direction, when a third vessel was likely to be passing on the outside of the overtaken vessel. Besides this general rule, the caution was given to give all overtaken vessels the widest possible berth, and, at the first sign of seesawing, sheering or other effects of suction upon the overtaken vessel, to check down and drop behind.

These rules doubtless seemed to many present at the time to be too stringent, and may even now appear to some of you to require over-caution; but I am of the opinion that the results of the past five years have justified Mr. Coulby's attitude.

I have carefully examined the records in my office, which contain a report of every accident which has happened in any of the fleets which I represent, and have failed to find a single disaster since the date of that discussion, which has been due to the suction of a vessel under Mr. Coulby's management. In view of the numerous and expensive suction cases which had preceded the discussion, it seems to me that this instance alone is a sufficient justification, not only for the stringent rule of conduct laid down at that meeting, but for the continuance of these meetings for the discussion of questions of navigation and management.

COLLISION CAUSES.

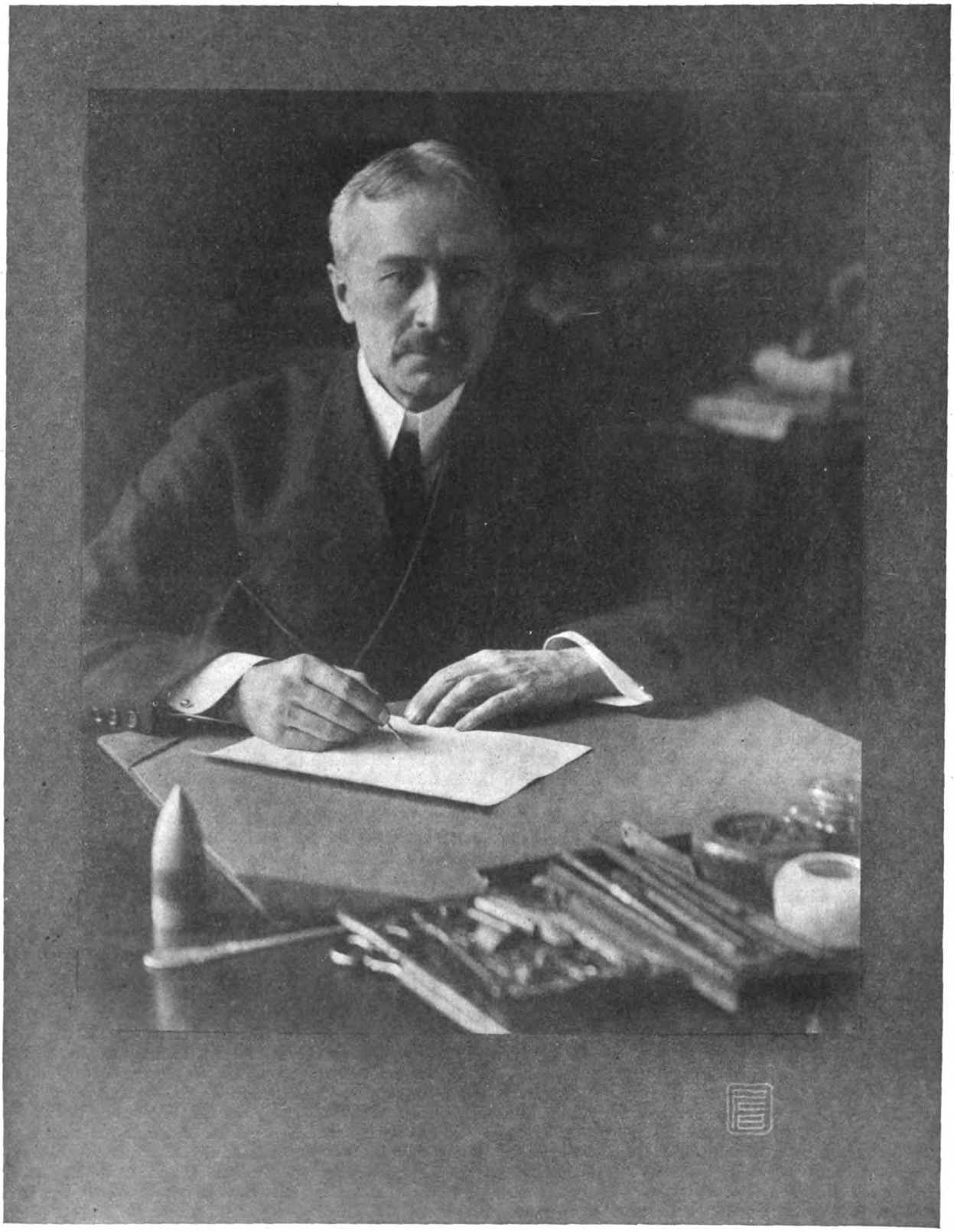
In making his usual request for a talk this year, Mr. Coulby has asked me to go over the records of my office for two or three years past; also to take into consideration other collision cases in fleets not represented by me, but which have come to my notice, and to extract from these, so far as possible, the principal kinds of negligence which seem to be most prevalent on the great lakes at the present time, and which therefore most require discussion. As a result of this investigation, I have chosen four or five topics which seemed to me to cover the principal of the causes which have contributed to recent collisions. These will be discussed in their order.

NAVIGATION IN FOG—GENERAL DISCUSSION.

(1) Almost universal carelessness appears to have grown up on the great lakes as to speed and signals in a fog. The rule provides, as you know, that every vessel shall, in thick weather by reason of fog, mist, falling snow, heavy rain storms or other causes, go at moderate speed. It is not my purpose to discuss what constitutes "moderate speed." The courts have held that this question of speed in a fog is a relative one, and depends upon the circumstances surrounding the vessel at the time. Each of you must determine for himself whether under a given state of circumstances, you have checked sufficiently to meet this general requirement of the law. My only suggestion in this connection is that it is better to err on the side of too low rather than too high speed. The point which I particularly wish to impress upon you is the latter part of

Generated on 2024-08-28 13:27 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

MR. HERMON A. KELLEY.



"EACH OF US LOOKS AT A THING FROM HIS OWN STANDPOINT. YOU SEE THE EFFECT OF FAILING TO BLOW A CERTAIN SIGNAL FROM YOUR PILOT HOUSE. I SEE IT FROM BEHIND THE TRIAL TABLE; MR. COULBY SEES IT THROUGH THE HOLE IT MAKES IN HIS TREASURER'S REPORT. EACH OF US NEEDS TO LOOK AT THE MATTER FROM THE POINT OF VIEW OF THE OTHERS."

Generated on 2024-08-28 13:31 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

the rule above referred to, which reads as follows:

"A steam vessel, hearing apparently not more than four points from right ahead the fog signals of another vessel, shall at once reduce her speed to bare steerage way, and navigate with caution until the vessels shall have passed each other."

I have reason to believe that this rule is being habitually disregarded by half of the masters on the great lakes. A fog collision case rarely arises in which one or both of the vessels is not proceeding at too great a rate of speed. It is usually impossible to determine whether the original rate of speed of the vessels was moderate or not within the meaning of the first part of Rule 15 just quoted, but whatever the original speed may have been, if each of the vessels had immediately checked down further to bare steerage way upon hearing the fog signal of the other, the collision could not have occurred.

After full consultation with Mr. Coulby upon this subject, I am authorized to state that hereafter, a disregard of this rule will not be tolerated by the Pittsburgh Steamship Company.

Some of you may be raising in your minds the same objection which was raised at the time I gave warning of the danger of attempting to pass another vessel going in the same direction in the vicinity of a third vessel, to which reference has already been made. It is true that in these strenuous times, your owners want the quickest dispatch consistent with safety, but the time lost by checking down to bare steerage way when another vessel is approaching from ahead in a fog is nothing compared with the danger and loss which is constantly being caused, not only to ship and cargo, but to the lives of crews, by the growing disregard of this rule by lake masters.

While upon this subject it may not be amiss to call attention to a general carelessness which seems to prevail on many steamers while running in a fog. A friend of mine who went up the lakes last summer upon a steamer which shall be nameless, tells me that they ran for some four or five hours in a fog on Lake Superior. Over half of this time the master of the steamer was in his stateroom, and the second mate was in charge of the pilot house. Noticing that the fog signal was not being blown regularly my friend, who had some of his family on board, and therefore had special regard for the safety of the ship, undertook the duty himself, and for more than an hour attended to the blowing of the signals personally. During this time there was no watchman on deck; that official being aft somewhere attending to a deck job under orders of the second mate. The second mate himself during much of the time was seated comfortably in a chair on the top of the pilot house, puffing at his pipe. There were two steamers following, and fog signals were to be heard all around the horizon. The speed of the ship was not checked in the least, nor was a single passing signal blown to any vessel bound in the opposite direction, although several vessels were met almost within hailing distance. Finally my friend became so nervous over the situation that he went below and called out the captain, who seemed to be very much disturbed, and immediately arranged for the blowing of regular fog signals, called the watchman to his post and took general charge in the proper manner.

While I do not believe that such gross carelessness as that above described is a very usual occurrence, yet I have seen enough personally, and have discovered enough in certain reports of accidents which have come under my observation, to convince me that in certain particulars, at least, nearly all of the items of negligence described by my friend are, at one time or another, to be observed on half the steamers navigating the lakes. It is a curious circumstance that in nearly every fog collision which has occurred during the past two years, the master of either one or both of the vessels involved has "just gone below." In many cases the watchman was engaged in some other duty than the one which the law requires of him; and while I believe it is very unusual for the officers of a vessel to omit blowing fog signals at regular intervals, many instances have occurred in which passing signals have not been blown. In the matter of speed, one at least of the two vessels involved is almost always in fault.

NAVIGATION IN FOG—RULES.

If the following rules were uniformly obeyed, I believe that 90 per cent of all the fog collision cases would be avoided.

First: Run at moderate speed, and upon hearing fog signals of another vessel not more than four points from right ahead, at once reduce your speed to bare steerage way, and keep it there until the other vessel is well clear. Take no chances on the bearing of the other vessel, but if you are in doubt whether she is not more than four points from dead ahead, take the benefit of the doubt and check down to bare steerage way anyhow.

Second: Never navigate in a fog, or for that matter, never navigate at all without a watchman properly stationed. The proper station for a watchman is on the forecastle-head, unless the weather conditions are such as to make that station impossible. Above all things never navigate in a fog without a watchman on the lookout. He may be of very little practical assistance to you in your navigation, but when you come into court to defend a lawsuit, his absence is more than likely to lose the case.

Third: Never on any account fail to blow the prescribed signals in foggy weather, and never fail to give and to answer the passing signals prescribed by law.

PASSING SIGNALS.

(2) Equally prominent in the list of causes of collisions is the singular reluctance many masters seem to have to blowing passing signals, and especially danger signals. The law is perfectly plain, and absolutely requires the exchange of passing signals under certain conditions with which you are all familiar; yet I have many times stood on the decks of steamers sailed by masters now in this room and seen them meet and pass other vessels without any exchange of passing signals.

There is now pending a case in which the testimony of a reputable master is introduced by my opponent, to prove that it is not customary under many circumstances for steamers meeting nearly head on to exchange passing signals. This testimony is introduced to excuse the master of my opponent's vessel from a failure to blow a signal. In other words, this practice has gone so far that reputable masters are ready to appear upon the witness stand and excuse themselves for failure to obey the laws of Congress upon the plea that such disobedience has become customary on the great lakes.

I recall the case of one master, whom all of you probably know, and who is said to be the laughing stock of other captains, because he goes up and down the rivers always blowing passing signals.

I am aware that it may sometimes look foolish from the standpoint of the man on the pilot house to blow a passing signal to another vessel which seems to be meeting and passing him at a good safe distance off on one side or the other, but it is just such cases as this in which unexpected contingencies frequently arise, resulting in collisions; then, when you are put upon the witness stand, and are obliged to admit that you failed to perform the statutory duty, you are putting in jeopardy thousands of dollars of your employer's money.

Generated on 2024-08-28 13:26 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

The presumption of the courts is that every fault connected with the management of a vessel, and every omission of a statutory requirement or any regulation deemed essential to good seamanship, contributed to the collision, and in such a case the burden rests heavily upon the ship of showing not merely that her fault might not have been one of the causes of the collision, or that it probably was not, but that it could not have been.

In how many cases of omission to blow a passing signal would you be able to prove that such omission could not have contributed to the disaster.

ALARM SIGNALS.

Even more important, because more frequently omitted, is the rule which requires under certain circumstances the blowing of alarm signals. The omission to blow passing signals seems to be principally a matter of laziness, or possibly of false pride in your ability to navigate without the artificial aids prescribed by Congress. The failure to blow alarm signals seems to be deeper seated than this, and in many instances, even in the case of experienced masters whom I have cross-examined on the witness stand, a surprising ignorance of the uses and purposes of alarm signals has been developed.

An instance of this is on record in a collision case now pending in this very district, where in the testimony of an experienced master the fact was developed that he blew three two-blast passing signals to a steamer well off on his starboard bow; that he received no reply to any of these signals; that finally he heard a cross signal of two blasts from the other vessel, then two and one-half points off on his starboard bow and distant some 1,200 feet, and that he then answered with two blasts and hard ported. On cross examination he admitted that at the time he blew his last signal of one blast the other vessel was on a course apparently nearly opposite to his own, and that he had not observed her swinging any to starboard; that there was room at that time for her to pass him starboard to starboard. He states that at the time he blew his two-blast signal, he did not think it was possible to pass the other vessel port to port. Asked why, under such circumstances, he did not blow a general alarm instead of answering with two blasts, he indulges in about a dozen pages of quibbling, in the course of which he shows considerable ignorance of the rules under such circumstances, and finally confesses that he supposed that he should have blown an alarm.

While it is possible that the blowing of an alarm signal under these circumstances might not have prevented the collision it will manifestly be impossible for him to prove that it could not have prevented it. He has therefore convicted his vessel of a statutory fault, for which his owners will have to pay.

In the case just cited, the same master on the face of his own story has convicted himself of another fault, in failing to blow an alarm and stop his engines the minute he failed to receive a reply to his repeated one-blast signals. The rule requires the blowing of an alarm in all cases where the intentions of the other vessel are a matter of doubt, and certainly such intentions could not have been a matter of certainty if, as this master testifies, she made no reply to his one-blast signals.

His conduct also furnishes another illustration of a point which was made under a previous topic. This master seeks to excuse his failure to stop his engines and blow a general alarm when he failed to receive a reply to his repeated one-blast signals on the ground that it has become so common on the great lakes not to reply to passing signals that he was not at all surprised at the failure of the other vessel to reply to his signals.

OBEYING SIGNAL LAWS.

Further illustration is unnecessary. Do not be afraid to use your steam on signals which are required by the laws of the land. You can better afford to be laughed at by less scrupulous masters than to run the risk of ruining your professional career by failing to obey the rules of navigation. Your owners can better afford to buy coal enough to furnish steam for statutory signals, than they can to pay damages caused by your economy in this respect.

OVERTAKING AND OVERTAKEN VESSELS.

(3) Another subject directly connected with the one just discussed is the rule governing the conduct of overtaking and overtaken vessels. A habit has grown up on the great lakes of answering the signal of an overtaking vessel asking permission to pass by a signal of three blasts. Such an answer is not recognized by the law, and is in nine cases out of ten wholly unjustifiable in practice. While another vessel coming up astern blows you a signal of one or two blasts, asking permission to pass, make up your mind whether it is safe under all the circumstances to permit her to pass. If you decide that it is, answer him promptly with one or two blasts, as the case may be. If you decide that it is unsafe, or have any reason for not wishing him to pass, blow an alarm, as the law requires. I have tried half a dozen cases in court, where, instead of giving either the signal permitting the overtaking vessel to pass or the signal forbidding it, the master of the overtaken vessel has blown three blasts. In one of these cases witnesses were introduced on both sides to show the meaning of the three blast signal. The witnesses on one side claimed that this signal required the overtaking vessel to check down and remain behind. The witnesses on the other side testified that the three blast signal signified that the overtaking vessel was permitted to pass, but required such passing to be at very slow speed. This illustrates the confusion which must always arise from the attempts of masters on the great lakes to substitute signals under rules and customs of their own rather than to adhere to the signals prescribed by Congress.

In this connection Mr. Coulby has asked me to discuss a question recently put to him by one of the masters in the fleet. This question relates to the duty of a steamer with a tow, proceeding down stream through the rivers, when permission to pass is requested by an overtaking vessel.

Of course, if the channel is clear and free from danger ahead, and if the overtaking vessel is fast enough to be able to keep out of the way of the steamer with the tow, there can be no good reason for keeping her astern by refusal to acquiesce in her signal. In many instances, however, lone steamers overtaking tows are in a great hurry until they get past the towing steamer and are then in the habit of checking down, making it extremely difficult for the towing steamer to reduce her speed and handle her tow barge. A case in point is afforded by a large steamer with consort approaching Ballard's Reef channel, downbound. The overtaking steamer signalled for permission to pass. The permission was granted; whereupon the overtaking steamer went by, then checked down. The towing steamer was able to keep behind until the vessels approached the Lime Kilns, when the steamer ahead reduced her steerage way so that the towing steamer was unable to maintain sufficient headway to handle her barge and drew up very close to the quarter of the lone steamer. The master of the latter thereupon became very much excited and wanted to know what the towing steamer was trying to do. The master of the towing steamer very coolly replied that unless the lone steamer went ahead on her engines it looked as though he was going to pass him,

Generated on 2024-08-28 13:35 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

and that if the two steamers did not hurry up, it looked as if the barge would pass them both.

The question when you should permit an overtaking vessel to pass you is always a relative one, and no general rule can of course be laid down. It should be remembered, however, that a large modern steamer with consort, bound down the rivers, is only a little slower than many of the lone steamers; in fact, with the exception of package freighters, there are few lone steamers which would suffer very much delay by remaining behind one of the Pittsburgh Steamship Co.'s steamers with consort, at least until the latter had reached waters where there could be no possible danger of such a situation as the one above described.

While, therefore, I should not, of course, recommend anything resembling stubbornness, much less hoggishness, in this matter of consenting to pass, yet you are perfectly within your rights to refuse such consent where in your judgment there is any danger of the overtaking vessel checking down after she has passed you and thus embarrassing you in the handling of your consort.

Above all things, whatever you decide under such circumstances, do not blow a signal of three blasts! Let the other fellow navigate his own vessel. Do not attempt to make him stay behind by blowing a signal that is not recognized by the law, and do not attempt to prescribe his speed in passing you by blowing a signal equally unknown to the rules of navigation. If you decide to let him go by, blow him a signal of one or two blasts, as the case may be. If you decide to request him to stay behind, blow him a signal of several short, sharp blasts, as the statute prescribes. If he attempts to pass at too high a speed, blow him another alarm.

LIGHTS.

(4) One other matter has been called to my attention in a few cases, which should not, I think, be passed over without mention at this time. In the old days, when coal oil was used for signal lights, it was always possible, from the lawyer's standpoint, at least, to prove that a vessel's lights were properly set and brightly burning by the testimony of the second mate and watchman, who had supervision of the matter. In these modern days, when the electric light has largely superseded coal oil, it sometimes happens that the engineer turns on the ship's lights and that the forward watch is not sufficiently alive to the necessity of observing carefully whether the side and range lights are in proper order.

In one or two cases now pending in the courts the question of lights is in issue, and it may perhaps be difficult to find any member of the crew of the vessel whose lights are in dispute who can swear from personal knowledge that the same were set and burning.

My suggestion upon this head is that rigid orders be issued on board your vessels to both the officer in charge of the deck and the watchman, not only to see that the lights are turned on by the engineer at the proper time, and that all the electric lamps required to be shown are burning, but that the lights be looked to several times during the night, to make sure that some one of the electric lamps may not have burned out.

FAMILIARITY WITH RULES.

(5) Finally, I have a suggestion to make which may sound superfluous to many of you, but which, if properly followed, will embrace all the matters to which I have heretofore referred, and many others which time forbids me to mention:

STUDY THE RULES OF NAVIGATION!

I have been surprised many times in the course of my practice to note the frequency with which masters of long experience will fall down on cross examination concerning the White Law and the Pilot Rules. I am aware that most of you feel that these rules have become so much a part of your very selves by long experience in their application, that it is unnecessary to give them any further study. I am also aware that you are placed on the pilot house for the purpose of navigating your vessel, and that preparation for possible litigation is not regarded as part of your regular duties. At the same time it must be very humiliating to a master of twenty-five years' experience to go upon the witness stand and find himself unable to answer some of the simplest questions as to what the rules of navigation actually provide. Yet so common is this experience that I seldom put a master on the witness stand that I do not tremble for his replies to questions of this character which are almost sure to be put on cross examination.

The act of Congress and the Pilot Rules are both brief. They could be actually committed to memory by any of you within a very short time, and while all of you are, I believe, sufficiently familiar already with these rules to meet most of your requirements while standing on the pilot house, I cannot believe that a still greater familiarity with them will injure your skill as seamen, and I feel very sure that such familiarity would very greatly add to your effectiveness as witnesses.

SUMMARY.

You will pardon the plainness with which I have spoken today, but nothing that I have said is without justification in the records of my office, and in the experience of actual occurrences within the past few years. Moreover, all that I have said has been previously submitted to and has the approbation of the president of the company, in whom each of you, as well as everyone who has ever worked with him, has the greatest confidence.

While recognizing your greater experience in practical navigation, Mr. Coulby and myself have the advantage of statistics which have been made up from the reports and records of all your individual experiences. From these statistics we have been able to put our finger on the principal causes of the disasters upon the great lakes. As I said at the outset, each of us sees these matters from his own standpoint. Each of you sees his individual experiences from his pilot house. The management of the company sees the combined results of all your experiences in the records of your successes and your failures. In this respect we are all working toward the same result; that is, to reduce to the lowest possible number the disasters arising from negligence. It is solely for the purpose of furthering this result that I have assumed to address you. I feel, and in this feeling I am sure that Mr. Coulby concurs, that the fleet of the Pittsburgh Steamship Co. is, on the whole, commanded by men as intelligent and able as can be found on fresh water. My only object in speaking as I have is, if possible, to contribute something, however small, to the maintenance of this high standard.

Errata: A serious mistake in transcription occurs in the second paragraph under the sub-head of Alarm Signals in Mr. Kelley's article. The form containing it was printed before it was discovered. The corrected paragraph will be found on page 32.

Steamer Henry Steinbrenner, bound up, parted her wheel chains while passing Port Huron this week and ran into the Grand Trunk railway dock. She did considerable damage to the dock as well as smashing six frames and four plates. She will probably return to Detroit for repairs as soon as an inspection is held.

Generated on 2024-08-28 13:37 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

SCIENTIFIC LAKE NAVIGATION

BY CLARENCE E. LONG

THE DEVIATION BY CROSSING RANGES.

The objects selected for this purpose should be two fixed and well-defined objects on shore, not less than two miles apart, and the greater the distance the better. The student can readily see the theory of this: The farther apart the quicker the ranges can either be opened or shut; and the vessel is more easily and with greater accuracy put and kept on the range, and more quickly noticed when off the range. This is on the principle that the distance of the arc which measures the line forming the angle, becomes greater as the lines are increased.

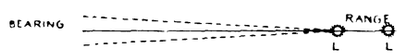
In transit-bearings of this kind, the further off the back object of the range, the better, and the exact moment of transit is easily noted; whereas, on the other hand, when the objects forming the range lie tolerably close together, and the observer some little distance from them, it is difficult to discover when they are actually in one, and an error of 2 or 3 degrees in consequence is quite possible. To illustrate for yourself, draw a straight line and another one meeting it so as to form an angle of 2 or 3 degrees. The farther these lines are prolonged the greater the distance becomes between them. Just so with the objects for transit-bearings, or any range for that matter.

Furthermore, when observing, be sure to take the compass bearing of the back object, which shifts but slowly, and note the reading at the instant the front object is seen to transit. The more rapid change in the bearing of the near object renders it difficult to follow and get correctly at the proper moment. By keeping the sight vanes on the back object no difficulty will be experienced in "catching" the two objects in one at the precise time. Sometimes when one of the objects is indistinct, an assistant with the "glasses" to tell you when the objects are exactly "on" is a great help.

To become an expert at taking compass bearings requires considerable practice, good judgment, and last, but not least, a clear head. Do not imagine that you will be able to take as accurate a bearing the first time as you will the one-hundredth time. Remember that "practice makes perfect." The instrument for taking bearings should be of good make. Get a good pelorus, or one of Fields' instruments, and you will never have cause to regret it.

TO FIND THE DEVIATION BY TRANSIT BEARINGS.

A lighthouse on the end of a pier, breakwater or crib, with some object on shore, such as a church steeple, a chimney on a prominent building, etc., are convenient for the formation of a table of deviation of the compass. These objects are usually shown on large scale charts of important harbors. Hence, all that is necessary for the navigator is to establish the correct magnetic bearing thereof, by laying off the true bearing of the range he desires to utilize for the purpose and correct it for the Var. given on the chart for the locality, and he is ready for what is to follow:

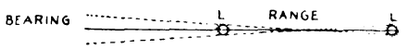


A short range. Boat could be on either dotted line and it could hardly be detected by the range.

An example will plainly show the necessary proceedings to be observed in forming a table of deviation by this process.

Imagine yourself and boat off the harbor of Chicago, ready for the work.

You look over the harbor chart of Chicago for two suitable objects for the range, and supposing you decided upon the Four-Mile waterworks crib (for the front object) and the Masonic



A long range. Boat could not get off range without it being detected at once.

Temple chimney (for the rear object). By laying these off on the chart with the parallel rulers you would find the true bearing (from the crib to the chimney) to be N 79 degrees W (W by N). The variation is 3 degrees Ely., making the correct magnetic bearing N 82 degrees W.

Now, do you see that by crossing this range on any desired course or point of the compass, that by taking a bearing with the azimuth attachment placed on top of the standard compass, or by the pelorus set to the same course as the compass, that if there is no deviation that the bearing of the range by compass will be the same thing as the correct magnetic bearing already figured and found; but whatever difference in the bearing as shown by compass and what you know the correct magnetic bearing to be is the amount of the Dev. for the point of the compass that the ship's head was at? And that it is named Ely. or Wly. according as the correct magnetic bearing of the objects is to the right or left of the compass bearing?

Supposing that you crossed the range steering NE by compass and when the two objects were in transit (in line with each other), and coinciding with the range finder of the azimuth attachment, that the bearing was N 89 degrees W, how much and which way is the Dev.?

Correct Magnetic bearing....N 82° W
Compass bearing .....N 89° W

Difference is Deviation.... 7° Ely.

Because the correct magnetic bearing N 82 degrees W is to the right of N 89 degrees W.

Remember the deviation in changing as the vessel goes round causes the compass bearing of the object to change, and from this difference as compared with the correct magnetic bearing gives the deviation on each course.

Now, we will see what can be done by running, or laying across the range on each point of the compass. Though before commencing the observations first rule a blank form like Deviation Table I; fill the first and third columns beforehand, while columns 2, 4, and 5 can be filled in during the time the observations are taken, or afterwards; it makes no difference.

The deviation being found as in the accompanying table, and placed in column 4, the position of the ship's head correct magnetic may be found by applying Wly. Dev. to the left of the compass course to find the correct magnetic course; and Ely. Dev. to the right, and they should be set down in column 5. It is, however, sometimes more convenient to rule another table to contain only the ship's head by compass, the deviation, and the correct magnetic course corresponding to ship's head by compass, similar to Table II.

BE SURE TO BEAR THIS IN MIND.

The vessel should be far enough (a half mile at least) from the front object of the range to avoid closing in too quickly. The speed of the vessel should not be more than five miles per hour and remember that she should be kept steady on the course at least three minutes before and at the time of crossing the range.

A minute or so before the vessel is ready to cross the range the observer

Generated on 2024-08-28 13:27 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

should sight through the eye-piece (peep-hole) of the azimuth attachment, keeping the hair sight on the back range, moving it slowly and evenly, as the vessel lessens the angle; then at the instant that the objects are in range (as seen through eye-piece) read the bearing in degrees from the compass (where the center mark of the azimuth instrument coincides with a division on the compass).

DEVIATION TABLE I.

Col. 1. Ship's Head by Compass.	Col. 2. Bearing of Chimney by Compass.	Col. 3. Correct Mag. Bearing of Chimney.	Col. 4. Deviation.	Col. 5. Ship's Head Correct Mag.
North	N 70° W	N 82° W	12° Wly	N 12° W
N by E.	N 75 W	"	7 "	N 4 E
NNE	N 80 W	"	2 "	N 21 E
NE by N.	N 85 W	"	3 Ely	N 37 E
NE	N 89 W	"	7 "	N 52 E
NE by E.	N 92 W	"	10 "	N 66 E
ENE	N 95 W	"	13 "	N 81 E
E by N.	N 97 W	"	15 "	S 86 E
East	N 98 W	"	16 "	S 74 E
E by S.	N 99 W	"	17 "	S 62 E
ESE	N 99 W	"	17 "	S 57 E
SE by E.	N 98 W	"	16 "	S 40 E
SE	N 98 W	"	16 "	S 29 E
SE by S.	N 97 W	"	15 "	S 19 E
SSE	N 96 W	"	14 "	S 9 E
S by E.	N 95 W	"	13 "	S 2 W
South	N 94 W	"	12 "	S 12 W
S by W.	N 92 W	"	10 "	S 21 W
SSW	N 90 W	"	8 "	S 31 W
SW by S.	N 87 W	"	5 "	S 39 W
SW	N 83 W	"	1 "	S 46 W
SW by W.	N 79 W	"	3 Wly	S 53 W
WSW	N 75 W	"	7 "	S 61 W
W by S.	N 70 W	"	12 "	S 67 W
West	N 66 W	"	16 "	S 74 W
W by N.	N 63 W	"	19 "	S 82 W
WNW	N 60 W	"	22 "	N 90 W
NW by W.	N 59 W	"	23 "	N 79 W
NW	N 58 W	"	24 "	N 69 W
NW by N.	N 59 W	"	23 "	N 57 W
NNW	N 62 W	"	20 "	N 43 W
N by W.	N 66 W	"	16 "	N 27 W

THE VALUE OF USING THE PELORUS.

If a pelorus is used [this is the instrument best adapted for all purposes of this kind] the reading can be taken any time after the vessel has crossed the range, so long as it was set to the range carefully, and not moved a particle from that time until the bearing is read off, and for this reason it is much more convenient than any other instrument. Clamp the pelorus dial to the course the ship is steering on and where the sight vanes cut the object, read off, the difference between this and what you know the correct magnetic bearing to be will be the amount of the deviation for the compass course steered.

TABLE II.

Ship's Head by Compass.	Deviation in Degrees.	Ship's Head Correct Mag.
North	12° Wly	N 12° W
N by E	7 "	N 4 E

And so on with every point of the compass

It is advisable to have a person (one of the officers) stationed near the standard compass to steady the wheelsman, so as to leave the observer free to attend to the observations.

TO SET THE COURSE BY STANDARD COMPASS.

Stand by the standard compass yourself. Order the helm to port or starboard till the ship is precisely on the course or point of the compass you desire by standard. At that instant the man at the wheel notes the direction by his compass and steadies the ship's head to it. After a few minutes compare the two courses again to see that the same difference exists between the two compasses; or when the wheelsman is directly on the course given him, a look at the standard compass will show whether things are right or wrong.

THE DEV. FOR STANDARD COMPASS.

The deviation is usually ascertained for the standard compass first, and then the steering compass compared by it afterward. One reason for this is that the standard compass usually shows the least deviation, on account of its elevation, which brings it away from the most of the ship's magnetism. The smaller the deviation the more accurately the ship's head correct magnetic can be determined from the ship's head by compass, which, in some cases (when the deviations are large) are two widely different things, strange as it may appear.

When the azimuth attachment is used in conjunction with the standard compass it then becomes necessary to ascertain the deviation of this compass first and the steering compass by it. When the pelorus is used this does not make so much difference. Another advantage of the pelorus is that if masts, smokestack, etc., interfere with the bearings on certain courses, instead of having to select another range of which the bearing is known, all that is necessary is to shift the pelorus to a position of advantage. You could not do this with your standard compass, or any other compass on board, for the simple reason that the deviation would be altogether different than for the position you had moved it from, which you know is due to the ship's magnetism changing its relations with the compass needle, or vice versa.

A FEW THINGS TO REMEMBER.

Always compare the bearings taken by compass with the known correct magnetic bearing of the same object, or objects, forming the range. Their difference is the Dev.

Remember that it makes no difference which is the greater of the two bearings—just subtract the less from the greater and name it according to the rules given.

It should be the simplest matter in the world to name the deviation, if it is handled properly. In fact, all there is to the problem is in the naming of the deviation. This is easy by the rules, but don't just memorize the rules without first understanding their principle. It must be easy to see that on whichever side the correct magnetic bearing is of the compass bearing is the name of the deviation. Take the example off Chicago: The correct magnetic bearing is N 82 degrees W and the compass bearing N 89 degrees W. It is easily seen that the correct magnetic bearing N 82 degrees W is to the right side of N 89 degrees W, consequently the Dev. is named Ely. The compass card must be drawn to the right in order to make N 89 degrees W come where N 82 degrees W should be.

Remember, too, that it does not matter on which point of the compass you start taking the bearings for the Dev. table. Always take it on the full point when possible. You can always do so by this method.

After the vessel has crossed the range on one course, see to it that there is sufficient sea room to turn and steady on the reverse course. For instance, supposing the vessel crosses on the SSW course, let her come back on the NNW course, and so on.

WHEN IT IS MORE THAN 90 DEGREES.

The student will have noticed that the compass bearings of this range in some instances are more than 90 degrees. In a case of this kind subtract the bearing thus found from 180 degrees, and change N to S, or the reverse. Thus, on the compass course East (according to the foregoing table) the range bore S 85 degrees W, and this from 180 degrees leaves 95

Generated on 2024-08-28 13:28 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

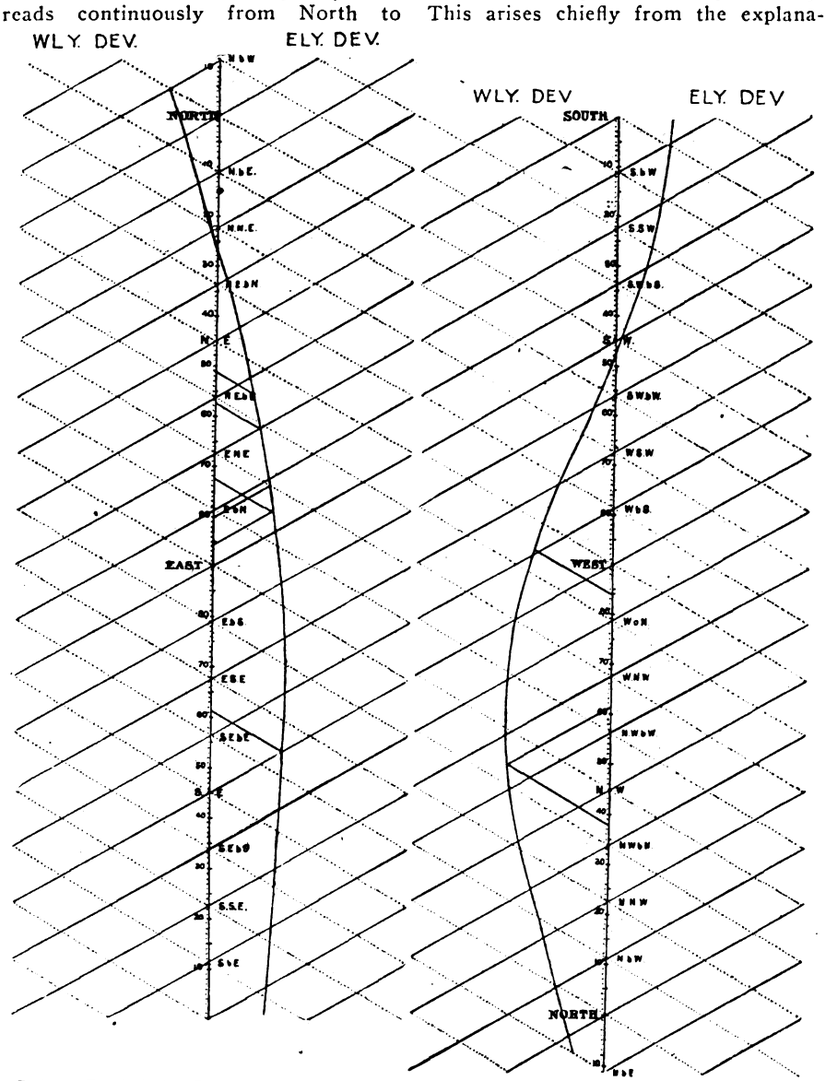
degrees, and changing S to N, gives us N 95 degrees W, which is equal to the same thing. This is done in order to make them all read from the same reckoning point, which is north in this case. By using a pelorus the bearings would come just as they do in column 2, because the pelorus dial reads continuously from North to South, or 180 degrees both ways—east and west; and also from south 180 degrees north, either east or west. Thus, by using the pelorus, this subtraction from 180 degrees is eliminated from the problem altogether—another advantage of the pelorus.

FOR THE SHIP'S HEAD AND NOT THE BEARING.

The student should bear in mind that the Dev. as found is for the point of the compass the vessel was heading on at the time of taking the bearing, and do not get it mixed up with the point of the compass that the bearing was taken on. The learner is apt to get this mixed in the manner stated.

SOMETHING TO GUARD AGAINST.

There is no error more frequently made than that of naming easterly deviation westerly or westerly easterly. This arises chiefly from the explanation of E and W deviation given in books on navigation. Being informed that the deviation is westerly if the north point of the needle is drawn to the west, and if drawn to the east easterly, if the bearing by compass on board is too much easterly, the mariner is apt to imagine that the north end of the needle is drawn to the east, whereas the contrary is the fact. The needle is drawn to the west, and by that means an easterly point on the compass card is drawn toward the direction of the body whose bearing is observed, which makes it appear by compass eastward. If the correct magnetic bearing be to the right of the bearing by the compass on board, the deviation is easterly; if the left, westerly. This is the rule to remember. Memorize it and see the reason for it and you cannot be mistaken. Just keep tab on which way the card is drawn and you have the name of the deviation.



Rules:—To find the Correct Magnetic Course—From the Compass Course on the vertical line, measure to the curve parallel to the dotted line and return to the vertical line in a direction parallel to the plain line.

To find the Compass Course—From the Correct Magnetic Course on the vertical line, measure to the curve parallel to the plain line and return to the vertical line in a direction parallel to the dotted line.

The dotted lines represent compass courses, the plain lines correct magnetic courses. To find the deviation for the ship's head correct magnetic measure on the plain line to the curve. To find it for the ship's head by compass measure to the curve on the dotted line.

When the Deviation is Easterly the curve is to the right of the vertical line; when Westerly, it is to the left.

Westerly Dev. throws a ship to the left of her course, and easterly Dev. throws her to the right—if not allowed for. To correct it then, allow the opposite way it carries. Exactly the same effect is produced by Var. of the compass, and in this respect the two are similar. They are also named and allowed alike.

DEVIATION SHOULD BE REGULAR.

The increase or decrease in the Dev. from one point of the compass to the next should be fairly regular. If there is any marked increase or decrease on any one point the bearing on this point and the points nearest to it should be taken a second time, to ascertain if any mistake was made in the first bearings observed. For example, supposing that the deviations were not regular between South and SE by S, put the ship on S by E and take another bearing and ascertain its deviation; compare this dev. with the one first ascertained for S by E, and this will tell you whether the first was correct, providing you have been careful in taking it. Do the same with SSE. If there is irregularity in the deviation and your bearings are correct the fault lies with the attraction producing the deviation, and not from the bearings.

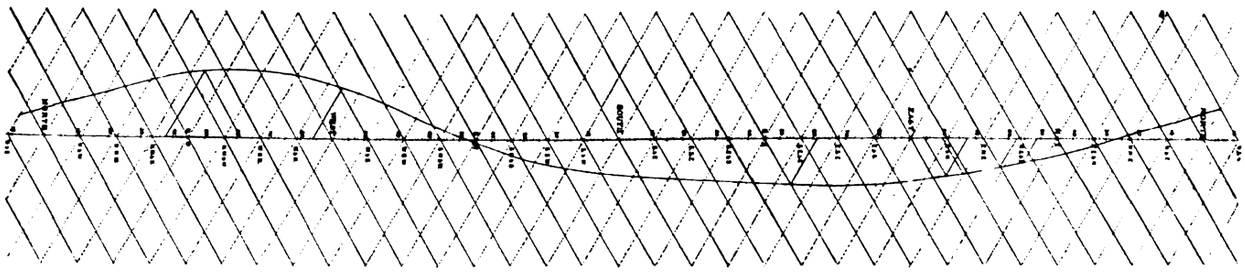
Note.—In case an incorrect Var. is applied to the true bearing to get the correct magnetic bearing, the Dev. will have an even and constant error* by the amount that the applied Var. is wrong.

WHEN THE DEVIATIONS ARE LARGE.

Note.—If the largest deviations are not more than 5 degrees (about half a point) and their increase or decrease is fairly regular, the deviations may, in practice, be applied directly to the correct magnetic points it is desired to make good in steering the course. But where these deviations are large (as they ordinarily are) then other complications set in which require a different prescription to effect a cure.

*Here error is used correctly. It implies something that is not correct.

Generated on 2024-08-28 13:30 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Rules:—To find the Correct Magnetic Course—From the Compass Course on the vertical line, measure to the curve parallel to the dotted line and return to the vertical line in a direction parallel to the plain line.

To find the Compass Course—From the Correct Magnetic Course on the vertical line, measure to the curve parallel to the plain line and return to the vertical line in a direction parallel to the dotted line.

The dotted lines represent compass courses, the plain lines correct magnetic courses. To find the deviation for the ship's head correct magnetic measure on the plain line to the curve. To find it for the ship's head by compass measure to the curve on the dotted line.

When the Deviation is Easterly the curve is to the right of the vertical line; when Westerly, it is to the left.

TO PLOT THE DEVIATIONS BY DRAWING A CURVE.

It then becomes necessary to plot these deviations on a diagram used for this special purpose, and the deviation curve so drawn is such that the deviation for the ship's head correct magnetic can be determined from that of the ship's head by compass. For in shaping a course by a compass having large deviations, serious errors may arise from applying the deviation corresponding to a compass course, instead of that corresponding to a correct magnetic course; for example, in Table I, the deviation with the ship's head West by compass is 16 degrees Wly; but if we desired to shape a course to make West correct magnetic, that deviation is not the correct one to use, because the ship was not heading correct magnetic West at the time it was determined; for on referring to column 5, it will be found that 22 degrees Wly is the Dev. corresponding to N 90 degrees W (or west) correct magnetic; thus a mistake of 6 degrees would be made in the course if the deviation corresponding to west by compass had been used.

If the correct magnetic course required to be made can be found in column 5, it is easy to find the corresponding compass course and deviation by inspection, but when the given correct magnetic course lies between any of the courses in column 5, it is a troublesome operation to find the corresponding compass course; but by means of a deviation diagram the operation is rendered easy and simple. Besides this, a knowledge of the use of a diagram is most important to the student, for by its means a deviation table may be formed from only eight observations taken with the ship's head on the eight principal points of the compass.

There are various diagrams and methods employed for this purpose, all of which have about the same end in view, and constructed on the same principle; but as that of Mr. Napier's "Diagram for Compass Deviation," is found more convenient, and is perhaps the most popular among seamen, we will explain its principles, how constructed, and its application. While it is true in principle, and of the greatest practical value in everyday sea practice, it is our intention to explain under Time Azimuths an easier and more simple way of handling this perplexing and troublesome variability of the compass needle. It is a method that requires only about half the number of rules and consequently half as much work. Where there are so many rules to remember, the chances of error are greater and are more apt to creep into the work. The student should thoroughly learn Napier's method of plotting and drawing the deviations to a curve for measurement, as it is simple and very convenient under certain conditions. Although you will probably never have occasion to use it, but instead will use the azimuth method, you should know how it is done if ever called upon to perform it. It will also add to your store of navigational knowledge.

(To be continued.)

WRECK OF THE ARCADIA.

The first tragedy of the season has occurred on Lake Michigan. Wreckage had been picked up by fishing tugs for several days, but not until the bulwarks were washed ashore near Pentwater bearing the name of the steamer Arcadia was the identity of the lost vessel known. The Arcadia left Manistee April 12 for Two Rivers with a cargo of hardwood lumber, shipped by the State Lumber Co. of Manistee to the Hamilton Manufacturing Co., Two Rivers. Shortly after the Arcadia cleared from Manistee stormy weather began. What happened is not known, as there are no survivors. The Arcadia was, however, entirely seaworthy. She was built by the Milwaukee Dry Dock Co. in 1888 and was 119 ft. long, 26 ft. beam, and 9 ft. 5 in. deep. She was purchased last fall from H. Starke of Arcadia, Mich., by Capt. Harry May of Cleveland. Capt. May caused her to be thoroughly repaired and was given a rating of A 1½. As he intended to make her his home during navigation season, he had taken his wife along with him. Capt. Carlton Graves, one of the oldest and best known masters on the lakes, secretary of the Cleveland lodge of the Ship Masters' Association, had shipped as mate. The circumstances surrounding this tragedy are extremely sad. Capt. May had saved enough money during his seafaring life to purchase the Arcadia, which is the only boat he ever owned. Capt. Graves was 79 years old and was the oldest master on the lakes. The crew numbered about twelve persons.

CORRECTION IN MR. KELLEY'S ARTICLE.

The paragraph under sub-head of Alarm Signals in Mr. Kelley's article in this issue on Legal Phases of Navigation should read as follows:

An instance of this is on record in a collision case now pending in this very district, where in the testimony of an experienced master the fact was developed that he blew three two-blast passing signals to a steamer well off on his starboard bow; that he received no reply to any of these signals; that finally he heard a cross signal of one blast from the other vessel, then two and one-half points off on his starboard bow, and distant some twelve hundred feet, and that he then answered with one blast and hard ported. On cross examination he admitted that at the time he blew his last signal of two blasts the other vessel was on a course apparently nearly opposite to his own, and that he had not observed her swinging any to starboard; that there was room at that time for her to pass him starboard to starboard. He states that at the time he blew his one-blast signal, he did not think it was

Generated on 2024-08-28 13:27 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

possible to pass the other vessel port to port. Asked why, under such circumstances, he did not blow a general alarm instead of answering with one blast, he indulges in about a dozen pages of quibbling, in the course of which he shows considerable ignorance of the rules under such circumstances, and finally confesses that he supposed that he should have blown an alarm.

While it is possible that the blowing of an alarm signal under these circumstances might not have prevented the collision, it will manifestly be impossible for him to prove that it could not have prevented it. He has, therefore, convicted his vessel of a statutory fault, for which his owner will have to pay.

In the case just cited, the same master on the face of his own story has convicted himself of another fault, in failing to blow an alarm and stop his engines the minute he failed to receive a reply to his repeated two-blast signals. The rule requires the blowing of an alarm in all cases where the intentions of the other vessel are a matter of doubt, and certainly such intentions could not have been a matter of certainty if, as this master testifies, she made no reply to his two-blast signals.

His conduct also furnishes another illustration of a point which was made under a previous topic. This master seeks to excuse his failure to stop his engines and blow a general alarm when he failed to receive a reply to his repeated two-blast signals on the ground that it has become so common on the great lakes not to reply to passing signals that he was not at all surprised at the failure of the other vessel to reply to his signals.

DANIEL MAHONEY & SONS.

Daniel Mahoney & Sons, Buffalo, N. Y., whose salesroom and works are illustrated on the cover of this issue, started business twenty years ago, as the Commercial Oil Co., manufacturing oils and greases, occupying the ground floor at No. 17 Main street. Although business was begun in a modest way, success came from the start, and three years later a stock of engineers' supplies, pipe and fittings, was added. Business grew and more room was taken, the range and signal lamp business of McBean & Edge was purchased by them and added to their business, and they continued the manufacturing of these goods. Their four-story building at No. 17 Main street was soon overtaxed, and it became evident that more room was necessary to keep apace with their rapid growing business, and only recently they purchased a large four-story building on Washington street, adjoining their Main street building, for their workshops and salesroom.

The stores and works now cover a large amount of ground space. On Main street it has a frontage of 24 ft., and 84 ft. on Washington street. The salesroom occupies a space of 24 ft. on Main street, running to Washington street, a distance of 200 ft., and the shop and works occupy 64 ft. on Washington street. This firm now carries a very large stock of engineers' supplies, pipe and fittings, oils and greases, kitchen utensils, and are the manufacturers of the "McBean" steel ranges and signal lamps.

The shop and works, which adjoins the salesroom on Washington street, is now located on the ground floor, is fully equipped with the latest modern power tools, and is complete in every detail, and contains a complete range and lamp factory. This firm enjoys a large volume of business on their ranges and lamps, and they are continually shipping their goods, in large quantities, all over the lakes, and to many ocean ports. In this particular line the business has increased wonderfully, and a force of men is employed regularly in this department.

Working of copper, tin and sheet iron is another branch of their business. With the advantage of their new facilities no order will be too large for them to undertake. A ground floor shop, a full equipment of the latest and most modern tools, and a force of skilled mechanics, afford them a position to handle all their work in a quick and satisfactory manner.

ITEMS OF GENERAL INTEREST.

The steamer Penobscot lost her shoe in Milwaukee harbor while endeavoring to reach her dock.

The steamer H. S. Holden had the honor of delivering the first cargo of ore at Ashtabula this season, carrying 6,219 tons from Escanaba.

On and after May 1 the New York office of Robert W. Hunt & Co. will be moved from 66 Broadway to the new West Street building, No. 90 West street, New York.

The steel tug John Kelderhouse was launched from the yard of Benjamin L. Coles, Buffalo, last week. It was built by Mr. Coles for his own use and is 31 ft. long, 20 ft. beam and 10 ft. 6 in. deep.

Cox & Stevens announce that beginning May 1 they will occupy new offices in the Corn Exchange building, No. 15 William street, New York, where they will have additional facilities for carrying on their business as naval architects, consulting engineers and vessel brokers.

The Directory Publishing Co., Ltd., 111 Ludgate Circus building, E. C., London, England, have just issued the 1907 edition of the Directory of Shipowners, Shipbuilders and Marine Engineers of the United Kingdom. It is an extremely valuable work to those desiring to reach British trade.

DANIEL MAHONEY & SONS
ENGINEERS SUPPLIES & FITTINGS
COMMERCIAL OIL CO.
OILS & GREASE
WORKERS OF COPPER TIN & SHEET IRON
DANIEL MAHONEY & SONS
MANUFACTURERS SIGNAL LAMPS & RANGES
COPPER & SHEET IRON WORK

DANIEL MAHONEY & SONS' BUILDING ON WASHINGTON ST.

FOR SALE: Derrick Scow 128 ft. long, 30 ft. beam and 7 ft. deep including hoisting engines, boilers and diving apparatus. Can be seen at Conneaut Harbor. A. Levine, 2508 E. 39th St., Cleveland, O.

Generated on 2024-08-28 13:26 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

LIABILITY OF VESSELS FOR INJURIES CAUSED BY COLLISION.

In cases of collision, the burden of proof is on the plaintiff to show that the defendant was negligent, and that he himself had used ordinary care, caution and maritime skill to avoid the collision. He cannot sustain his action merely by convicting the other party of negligence and fault conducing to the collision. He must go a step further and show conclusively that there was no fault or negligence on his own part. Where it appears that one of the vessels had neglected an ordinary and proper precaution, the burden is on her to show that the collision was not owing to her neglect, but would have happened equally if she had performed her duty. If a vessel disregards the provision of a statute, the burden is on her to show, in case a collision happens, that the accident was not owing to such disregard.

In cases of collision there are certain circumstances under which one of the vessels will be presumed to have been in fault. Thus a vessel in motion and under command, is presumed to be in fault if a collision occurs between her and a vessel at anchor in a harbor, in the day time. A steamer continuing her course, at nearly her full speed, through a fog so dense that a vessel carrying all proper light could not be seen at a distance of three hundred feet, is presumed to be in fault.

Whenever a steamer and a sailing vessel are approaching each other in such directions as to involve risk of collision, it is the duty of the steamer to keep out of the way of the sailing vessel and of the latter to keep her course. If the sailing vessel keeps her course, and a collision happens, the steamer will be presumed to be in fault. It has been decided that a row boat is not within the steering and sailing rules embodied in the navigation laws of the United States, and a steamer is not bound to change her course for such a boat. However the rule requiring a sailing vessel to keep her course when approaching a steamer in such a direction as to involve the risk of collision, does not forbid such necessary variations in her course as will enable her to avoid immediate danger arising from natural obstructions to navigation. But if the sailing vessel does change her course for the purpose of avoiding such obstructions, she is bound to return to it as soon as she has passed them, and if she fails to do this, and the steamer collides with and injures her, she cannot recover.

The question of liability for injury caused by a towed vessel has been before the admiralty courts in many cases. In an early case it is said: "It remains to ascertain, as in all cases where the question is whether a tug or vessel in tow is responsible for a collision, which of the two was a principal and which the servant. This must be determined as a question of fact, and depends upon the circumstances of the particular case. While it may be conceded that in England the tow is to be considered the principal, and while some of our own courts have followed the English rule, the weight of authority here seems opposed to any inflexible presumption upon the question." It follows, therefore, that the tug alone, or the tow alone, or both jointly, may be liable for the consequences of a collision, according to the particular circumstances of the case. Where a tug having a vessel in tow, ran her against another vessel, and did damage, the tug was held not to be liable, the vessel she was towing having been under the charge of a pilot, who directed the movements of both vessels. Whenever a tug, in charge of her own master and crew, in the usual and ordinary course of employment, undertakes to transport another vessel, which, for the time being, has neither master nor crew aboard, over waters where such accesory motive power is necessarily or usually employed, she must be held responsible for the proper management of both vessels. A schooner lying at anchor was injured by collision with a barge in tow of a tug. The evidence showed that the barge was properly steered and that the tug was in fault, and the latter was held liable for the damages. Where a collision between a vessel in tow of a tug and a ferry boat occurred by the separate and independent fault of the latter, she was held liable for the damages, although the tug also was somewhat in fault. Where a vessel in tow of a tug and a vessel at anchor collide through the fault of the tug and of the vessel at anchor, and without fault in the vessel in tow, the damages must be apportioned between the tug and the vessel at anchor.

In the case of the Swallow, the schooner Onondaga going down the St. Clair river, had anchored two miles above the flats, and just below a bend in the river. While she was so lying she was struck by the schooner Swallow which, with two other schooners, was being towed down the river by the tug Masters. It did not appear in evidence what was the agreement under which the Swallow was being towed. The Masters having taken hold of the vessels, assumed the control of them and proceeded down the river, each being manned by her own crew. The tug and the first schooner passed safely by the Onondaga, but the Swallow ran into her. When the collison became imminent, the master of the tug gave directions to the crews of the vessels in tow, and there was no fault in the seamanship of the crew of the Swallow. The owner of the Onondaga filed a libel against the Swallow alone, but the court decided that, in the absence of proof as to the agreement for the service or as to the usage on the river, it could not be said that the tug was under the control of the vessels constituting her tow; that, under the circumstances it was negligence for the tug to attempt to pass the bend with more than one vessel in tow; and that the tug, not the Swallow, was the principal in the transaction, and therefore liable for the damages.

(To be Continued.)

STRIKE OF OFFICERS.

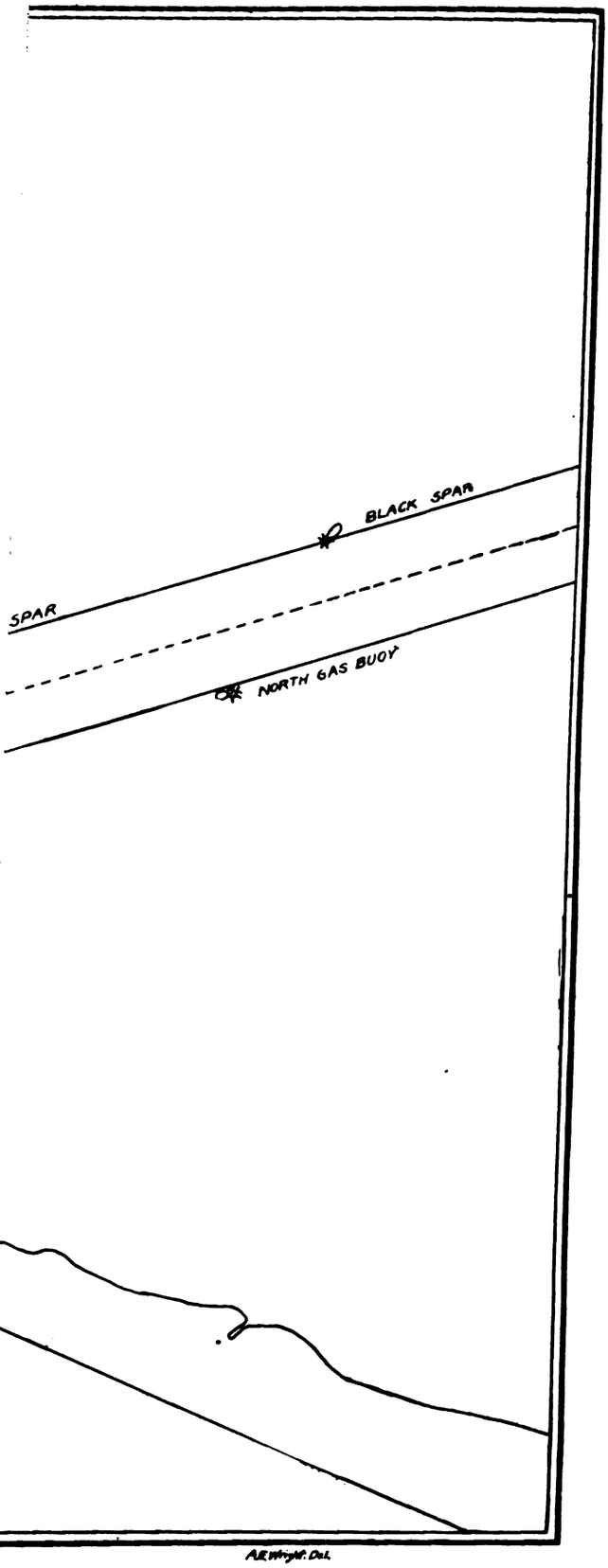
A general strike of ship officers on all the coastwise lines sailing from the port of New York has been ordered under the direction of the executive committee of Harbor No. 1, of New York of the American Association of Masters, Mates and Pilots, which is to go into effect on May 1. The strike is called to enforce the demands of the first, second and third officers for the wages of $100, $80 and $60 a month, respectively, and will affect the following lines, eighteen in number: Panama, Morgan, Old Dominion, Savanna, Clyde, Porto Rico, Brunswick, Ward, Merchants' & Miners', Red D, Mallory, Guffey Oil Co., Bull, American & Hawaiian, Standard Oil Co., Atlantic Coast Lumber Co., and Luckenbach lines. Several hundred men will be affected.

The officers have federal licenses and therefore could not leave their posts without due notice without violating the federal laws. In order to keep within the law the notice of the strike was given to the general managers of the eighteen companies involved, in the form of a notification of the resignations of the officers to go into effect on May 1.

The companies, so far, with the exception of the Merchants' & Miners', have made no open preparations for a strike.

A new daily passenger steamboat service will be inaugurated at once between New Bedford, Mass., and New York, by the New York, New Haven & Hartford Railroad, with first-class steamers in the service. The new line will run all the year round.

Generated on 2024-08-28 13:34 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



OFFICIAL CHART, LAKE CARRIERS' ASSOCIATION

Generated on 2024-08-28 13:26 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Generated on 2024-08-28 13:35 GMT / https://hdl.handle.net/2027/mdp.39015043584419
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google
Original from
UNIVERSITY OF MICHIGAN